



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS TX 75202-2733

**JUL 28 2014**

**SPECIAL NOTICE LETTER -- URGENT LEGAL MATTER**

**PROMPT REPLY NECESSARY, CERTIFIED MAIL: 7007 1490 0004 0582 2649**

**RETURN RECEIPT REQUESTED**

Marathon Oil Company  
5555 San Felipe Street  
Houston, Texas 77056

Re: Wilcox Oil Superfund Site, Bristow, Creek County, Oklahoma  
Request that you fund or perform RI/FS and reimbursement of costs  
Special Notice: Please respond with a good-faith offer within 60 days

Dear Sir/Madam:

The purpose of this letter is to invite Marathon Oil Company, as a Potentially Responsible Party (PRP), to enter into negotiations with the U.S. Environmental Protection Agency (EPA) to undertake a Remedial Investigation and Feasibility Study (RI/FS) regarding hazardous substance contamination at the Wilcox Oil Superfund Site in Bristow, Creek County, Oklahoma (Site). The EPA has determined that there is a release or a substantial threat of a release of hazardous substance(s) at or from the Site and has identified numerous parties as owner/operators at the Site. Based on your status as an owner/operator, the EPA has determined that you are potentially liable under Section 107(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), 42 U.S.C. § 9607(a), and are responsible for the cleanup of the Site, including all past costs incurred by the EPA in responding to releases at the Site. The EPA is now contacting you and each PRP to offer an opportunity to enter into negotiations to perform the selected response and resolve the liability for the Site.

**Opportunity to Negotiate**

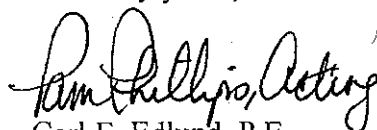
On behalf of the EPA, I am offering you this opportunity to enter into negotiations because the EPA believes that Marathon Oil Company may be responsible for the cleanup of the Site under the Superfund Law. I have enclosed a "special notice" which explains that responsibility more clearly in Enclosure 1. This notice also explains the purpose of the enclosed Draft Settlement Agreement and Order on Consent in Enclosure 2 and the enclosed Draft Statement of Work, which is Enclosure 3. A summary of past costs can be found in Enclosure 4. A list of all parties receiving this letter is contained in Enclosure 5. Enclosure 6 includes one document as an example showing evidence that you owned, operated, or leased at the Wilcox Oil Superfund Site.

Within fourteen (14) days of the receipt of this letter, I ask you to contact the EPA Superfund Cost Recovery Enforcement Officer, Mr. Lance Nixon at (214) 665-2203 or [nixon.lance@epa.gov](mailto:nixon.lance@epa.gov), or have your attorney contact the EPA Assistant Regional Counsel, Marvin Benton, at (214) 665-3190 or [benton.marvin@epa.gov](mailto:benton.marvin@epa.gov), and let the EPA know whether you plan to enter into on-going, good-faith negotiations to enter into a settlement agreement with the EPA to perform a Remedial Investigation and Feasibility Study at the Site.

My staff will be available to explain the Superfund program and special notice process to you and respond to any concerns and questions you may have. If you or your attorney have legal questions, please call Mr. Benton at (214) 665-3190. If you have technical questions about the Site, please contact the Remedial Project Manager, Mr. Bart Canellas, at (214) 665-6662. If you have any other questions, please contact Mr. Nixon at the number above.

We look forward to working with you during the coming months.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Carl E. Edlund, Acting".

Carl E. Edlund, P.E.

Director  
Superfund Division

Enclosures

**ENCLOSURE 1**

**SPECIAL NOTICE REGARDING REMEDIAL INVESTIGATION  
AND FEASIBILITY STUDY**

## **ENCLOSURE 1**

### **SPECIAL NOTICE REGARDING REMEDIAL INVESTIGATION AND FEASIBILITY STUDY WILCOX OIL SUPERFUND SITE BRISTOW, CREEK COUNTY, OKLAHOMA**

This Special Notice is from the U.S. Environmental Protection Agency (EPA). This notice says you may be liable for the costs of the cleanup of hazardous substances released into the environment at the Wilcox Oil Superfund Site (Site) which is located in Bristow, Creek County, Oklahoma.

This notice provides you with information in four categories:

1. First, this notice tells you that you may be liable for the cleanup of hazardous substances, including organic compounds (poly aromatic hydrocarbons) and metals identified as Contaminates of Potential Concern at the Wilcox Oil Superfund Site. Specific compounds include, 2-Methylnaphthalene, Benzo (ghi) perylene, Benzo (a) anthracene, Benzo (a) pyrene, Chrysene, Pyrene, arsenic, barium, chromium, copper, lead, nickel, thallium, and zinc. This notice is issued under the Comprehensive Environmental Response, Compensation, and Liability Act, which is abbreviated as "CERCLA." CERCLA is also known as Superfund.
2. Second, this notice asks you to pay certain costs and/or to finance or perform a Remedial Investigation and Feasibility Study (RI/FS) regarding the hazardous substance contamination on the Site under a settlement agreement with the EPA. The purpose of the Remedial Investigation is to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site. The purpose of the Feasibility Study is to determine and evaluate alternatives for remedial action to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site.
3. Third, this notice requests that you respond within 14 days from your receipt of this notice on whether you wish to be added to the on-going negotiations to enter into a settlement to conduct or finance the RI/FS.
4. Fourth, this notice explains that the EPA will consider any party's ability to pay in determining an appropriate settlement amount and/or performance of the RI/FS.

## BACKGROUND

The Site consists of the former Lorraine/Wilcox Refinery located in Bristow, Creek County, Oklahoma. The property was utilized by two different refineries with overlapping boundaries from 1915 to 1965. The Site includes remnants of former oil refining operations and tank farms. The Site has three major former operational areas and product storage areas. An active railroad divides the two former processing areas and product storage areas. Most of the refinery structures and tanks have been removed or are in ruins. The tank farm covers approximately 80 acres and has a number of refinery waste source areas of concern, including, a backfilled oily waste pond, a breached settling pond, a backfilled oily waste pit, a former pond apparently backfilled with solid refinery waste, and a number of tank bottoms. Groundwater containing oily waste liquid of a hydrocarbon nature is currently leaching into drainage ditches and surface waters at the Site. The results of samples collected observed releases to shallow ground water, surface water, sediment and subsurface soils. The results indicated high concentration of petroleum hydrocarbons, lead, and poly aromatic hydrocarbons in oily waste at numerous locations on Site. There are high concentrations of lead throughout the Site. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste of a hydrocarbon nature throughout the 125 acre Site.

### I. NOTICE THAT YOU MAY BE LIABLE

CERCLA says that four types of persons (entities) are liable for cleaning up (or paying the EPA to clean up) hazardous substances that have been released. The four types of liable persons are:

1. Persons who now own the place where the hazardous substance was released;
2. Persons who once owned or operated the place where the hazardous substance was released during the time when the hazardous substance was disposed of;
3. Persons who arranged for disposal or treatment of hazardous substances at the place where the hazardous substance was released; or
4. Persons who selected the place where the hazardous substance was released as a disposal site and transported the hazardous substances to that place.

The EPA's term for these persons is Potentially Responsible Parties or PRPs.

You may want to read the section of the CERCLA law, which tells which persons are liable for the cost of cleaning up hazardous substances. CERCLA can be found in Title 42 of the United States Code (U.S.C.) in Sections 9601 through 9675. The part of CERCLA which tells about these responsible parties can be found at Section 9607. Definitions of terms used in CERCLA can be found in Section 9601. Section 9607 is sometimes called Section 107, the section number which it has in the act of Congress.

Records which we have on hand indicate that you generated or transported hazardous substances to the Wilcox Oil Superfund Site. Accordingly, you may be a potentially responsible party (PRP) under the Superfund law. The EPA invites you to take stock of the evidence and to enter into the enclosed AOC for RI/FS on the Site in order to settle your liability with the EPA with respect to this matter.

## **II NEGOTIATION PERIOD AND MORATORIUM REGARDING CERTAIN ACTIVITY AT THE SITE**

The EPA has determined that use of the special notice procedures specified in CERCLA Section 122(e), 42 U.S.C. § 9622(e), may facilitate a settlement between the EPA and the PRPs the EPA has thus far identified. Therefore, pursuant to CERCLA Section 122(e)(2)(C), 42 U.S.C. § 9622(e)(2)(C), this notice offers you the opportunity to negotiate a settlement, to conduct an RI/FS at the Site. The settlement will provide for you and other PRPs to: (1) conduct or finance the RI/FS activities required for the Site, and (2) reimburse the EPA for costs to be incurred in overseeing the PRPs' performance of the RI/FS.

If settlement is reached between the EPA and the PRPs, the settlement will be embodied in an AOC to be issued by the Superfund Division Director, EPA Region 6.

A draft AOC, written specifically for the Site, and a draft Statement of Work (SOW) for the RI/FS activities are enclosed (Enclosure 2 and 3, respectively). An electronic version of the draft AOC and SOW may be obtained from EPA Assistant Regional Counsel Mr. Marvin Benton at (214) 665-3190.

## **III PLEASE RESPOND WITHIN 14 DAYS OF YOUR RECEIPT OF THIS LETTER**

Please use the enclosed draft AOC and draft SOW to assist you in determining whether you wish to negotiate a settlement to conduct the RI/FS and for reimbursing the EPA for future oversight costs. Please provide in writing a statement that you are willing to negotiate the performance and/or financing of the RI/FS in a manner consistent with the EPA's draft SOW and draft AOC and that you are also willing to negotiate the means to reimburse the EPA for response costs to be incurred in overseeing the PRPs performance of the RI/FS.

If the EPA determines that you have not submitted a statement within the 14-day period, the EPA may, thereafter, terminate its offer inviting you to the negotiation moratorium period pursuant to Subsection 122(e)(4) of CERCLA, 42 U.S.C. § 9622(e)(4), and commence such response activities or enforcement actions as may be appropriate.

Please mail, fax or email your statement to Mr. Marvin Benton at the following address:

Marvin Benton  
Assistant Regional Counsel (6RC-S)  
U.S. Environmental Protection Agency  
Region 6  
1445 Ross Avenue  
Dallas, TX 75202-2733  
(214) 665-3190  
FAX (214) 665-6460  
E-mail: benton.marving@epa.gov

**ENCLOSURE 2**

**DRAFT SETTLEMENT AGREEMENT AND ORDER ON CONSENT**

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 6

IN THE MATTER OF:  
Wilcox Oil SUPERFUND SITE  
Bristow, Oklahoma

ADMINISTRATIVE ORDER ON  
CONSENT FOR REMEDIAL  
INVESTIGATION/FEASIBILITY STUDY

See Appendix A for List of Respondents,  
Respondents

U.S. EPA Region 6  
CERCLA Docket No. \_\_\_\_\_

Proceeding under Sections 104, 107 and 122  
of the Comprehensive Environmental  
Response, Compensation, and Liability Act,  
as amended, 42 U.S.C. §§ 9604, 9607 and  
9622.

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT  
FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY

**I. JURISDICTION AND GENERAL PROVISIONS**

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the Respondents listed in Appendix A, incorporated by reference herein ("Respondents"). The Settlement Agreement concerns the preparation and performance of a remedial investigation and feasibility study ("RI/FS") at the Wilcox Oil Superfund Site ("Site"), located at in the N ½ of the NW ¼ of S29 T16N R9E and the SW ¼ of the SW ¼ of S20 T16N R9E in Creek County, Oklahoma and the reimbursement for future response costs incurred by EPA in connection with the RI/FS.

2. This Settlement Agreement and Order on Consent is issued under the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607 and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (Jan. 29, 1987), and further delegated to Regional Administrators on May 11, 1994, by EPA Delegation Nos. 14-14-C and 14-14-D. This authority was further redelegated by the Regional Administrator of EPA Region 6 to the Superfund Division Director by EPA Delegation No. R6-14-14-C (August 4, 1995).

3. In accordance with Sections 104(b)(2) and 122(j)(1) of CERCLA, 42 U.S.C. §§



9604(b)(2) and 9622(j)(1), EPA notified the Federal and State natural resource trustees on July 16, 2014 of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal and State trusteeship.

4. EPA and Respondents recognize that this Settlement Agreement and Order on Consent has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Order do not constitute an admission of any liability. Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement and Order on Consent, the validity of the findings of fact, conclusions of law and determinations in Sections V and VI of this Settlement Agreement and Order on Consent. Respondents agree to comply with and be bound by the terms of this Order and further agree that they will not contest the basis or validity of this Settlement Agreement and Order on Consent or its terms.

## **II. PARTIES BOUND**

5. This Settlement Agreement and Order on Consent applies to and is binding upon EPA and upon Respondents and their heirs, successors and assigns. Any change in ownership or corporate status of a Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent's responsibilities under this Settlement Agreement.

6. Respondents are jointly and severally liable for carrying out all activities required by this Settlement Agreement and Order on Consent. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Settlement Agreement and Order on Consent, the remaining Respondents shall complete all such requirements.

7. Respondents shall ensure that their contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and Order on Consent and comply with this Settlement Agreement and Order on Consent. Respondents shall be responsible for any noncompliance with this Settlement Agreement and Order on Consent.

8. Each undersigned representative of Respondents certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and Order on Consent and to execute and legally bind Respondents to this Settlement Agreement and Order on Consent.

## **III. STATEMENT OF PURPOSE**

9. In entering into this Settlement Agreement and Order on Consent, the objectives of EPA and Respondents are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site, by conducting a Remedial Investigation as more specifically set forth in the Statement of Work ("SOW") attached as

Appendix B to this Settlement Agreement and Order on Consent; (b) to identify and evaluate remedial alternatives to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Feasibility Study as more specifically set forth in the SOW in Appendix B to this Order; and (c) to recover response and oversight costs incurred by EPA with respect to this Order.

10. The Work conducted under this Settlement Agreement and Order on Consent is subject to approval by EPA and shall provide all appropriate and necessary information to assess Site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). Respondents shall conduct all Work under this Settlement Agreement and Order on Consent in compliance with CERCLA, the NCP, and all applicable EPA guidances, policies, and procedures.

#### IV. DEFINITIONS

11. Unless otherwise expressly provided herein, terms used in this Settlement Agreement and Order on Consent that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement and Order on Consent or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

b. "Day" shall mean a calendar day. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.

c. "Effective Date" shall be the effective date of this Order as provided in Section XXIX.

d. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

e. "Texas Commission on Environmental Quality" shall mean the State pollution control agency and any successor departments or agencies of the State.

f. "Engineering Controls" shall mean constructed containment barriers or systems that control one or more of the following: downward migration, infiltration or seepage of surface runoff or rain; or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.

g. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Order, verifying the Work, or otherwise implementing, overseeing, or enforcing this Order, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, Agency for Toxic Substances and Disease Registry ("ATSDR") costs, the costs incurred pursuant to Paragraph 54 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), Paragraph 40 (emergency response), and Paragraph 84 (Work takeover)".

h. "Institutional controls" shall mean non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and covenants, zoning restrictions, special building permit requirements, and well drilling prohibitions.

i. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

j. "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

k. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent, the SOW, all appendices attached hereto (listed in Section XXVII) and all documents incorporated by reference into this document including without limitation EPA-approved submissions. EPA-approved submissions (other than progress reports) are incorporated into and become a part of the Settlement Agreement upon approval by EPA. In the event of conflict between this Settlement Agreement and any appendix or other incorporated documents, this Settlement Agreement shall control.

l. "Paragraph" shall mean a portion of this Order identified by an Arabic numeral.

m. "Parties" shall mean EPA and Respondents.

n. "RCRA" shall mean the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, *et seq.*

o. "Respondents" shall mean those Parties identified in Appendix A.

p. "Section" shall mean a portion of this Order identified by a Roman numeral.

q. "Site" shall mean the Wilcox Oil Superfund Site, encompassing approximately

125 acres, located at N ½ of the NW ¼ of S29 T16N R9E and the SW ¼ of the SW ¼ of S20 T16N R9E in Creek County, Oklahoma and depicted generally on the map attached as Appendix C.

r. "State" shall mean the State of Oklahoma.

s. "Statement of Work" or "SOW" shall mean the Statement of Work for development of a RI/FS for the Site, as set forth in Appendix B to this Order. The Statement of Work is incorporated into this Order and is an enforceable part of this Order as are any modifications made thereto in accordance with this Order.

t. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

u. "Work" shall mean all activities Respondents are required to perform under this Order, except those required by Section XIV (Retention of Records).

## **V. FINDINGS OF FACT**

12. The Wilcox Oil Superfund site is an inactive and abandoned oil refinery located in Creek County, Oklahoma. The site consists of contaminated areas and surface water bodies due to the release from the former Lorraine and former Wilcox Refineries. These refineries were located in the N ½ of the NW ¼ of S29 T16N R9E and the SW ¼ of the SW ¼ of S20 T16N R9E in Creek County, Oklahoma.

13. The geographical coordinates for the site are 35°50'26.8966" north latitude and 96°22'48.693" west longitude. The property covers approximately 125 acres.

14. Two refinery process facilities and storage tank areas once operated at the two facilities. Recent investigations (2009-2011) indicate the site area contains elevated concentrations of metals and organic compounds in the former storage tank areas, surface soils, surface impoundment and sediments. Levels of metals and/or oily non aqueous phase liquid (NAPLs) were also detected in three private residential wells on site, and from three wells adjacent to the property. A former church facility and six residents are presently on the Site.

15. A large volume of visible waste is present where refined product and crude oil storage tanks were once located. Approximately 4 inches of crude oil were discovered on the former church property when a cap broke off an existing pipeline. Hydrocarbon sheen was visible when digging 2-3 feet below ground surface. Elevated levels of metals and semi-volatiles are present in waste samples collected.

16. The Site property was utilized by two different refineries with overlapping boundaries from 1915 to 1965. The Site includes remnants of former oil refining operations and tank farms. The tank farm covers approximately 80 acres and has a number of refinery waste source areas of concern, including a backfilled oily waste pond, a breached settling pond, a backfilled oily waste pit, a former pond apparently backfilled with solid refinery waste, and a number of tank bottoms. Groundwater containing oily waste liquid of a hydrocarbon nature is currently leaching into drainage ditches and surface waters at the Site. The results of samples collected observed releases to shallow ground water, surface water, sediment and subsurface soils. The results indicated high concentrations of petroleum hydrocarbons, lead, and poly aromatic hydrocarbons in oily waste at numerous locations on Site. There are high concentrations of lead throughout the Site. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste of a hydrocarbon nature throughout the 125 acre Site.

17. In summary, the surface soils and subsurface soils are contaminated with pesticides, volatile organics, and heavy metals. The onsite surface water bodies and groundwater are contaminated with volatile organics and heavy metals. The sediments are contaminated with pesticides and heavy metals. Eighty (80) Solid Waste Management Units (SWMUs) (including approx. 30 sumps and 10 drum/drum storage/drum crushing areas) have been identified onsite to date that are deemed areas of concern.

18. A detailed title search in the Creek County Clerk office confirms that the property was used in oil refinery operations from 1915 until November 1963.

19. The Site was listed on the National Priorities List ("NPL") pursuant to CERCLA Section 105, 42 U.S.C. § 9605, on December 12, 2013.

20. The list of Respondents in Appendix A numbered 1 (one) through 5 (five) previously owned and/or operated one or more of the properties within the Site at the time hazardous substances were released.

## **VI. CONCLUSIONS OF LAW AND DETERMINATIONS**

Based on the Findings of Fact set forth above, EPA has determined that:

21. The Wilcox Oil Superfund Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

22. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

23. The conditions described in Section V of the Findings of Fact above constitute an actual and/or threatened "release" of a hazardous substance from the facility as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

24. Each Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

25. Respondents are responsible parties under Sections 104, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607 and 9622. Each Respondent is a person who either generated the hazardous substances found at the Site, is a person who at the time of disposal of any hazardous substances owned or operated the Site, or is a person who arranged for disposal or transport for disposal of hazardous substances at the Site. Each Respondent therefore may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

26. The actions required by this Order are necessary to protect the public health, welfare or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

27. EPA has determined that Respondents are qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondents comply with the terms of this Order.

## **VII. SETTLEMENT AGREEMENT AND ORDER**

28. Based upon the foregoing Findings of Fact and Conclusions of Law and Determinations, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Order, including, but not limited to, all appendices to this Settlement Agreement and Order on Consent and all documents incorporated by reference into this Settlement Agreement and Order on Consent

## **VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS**

29. Selection of Contractors, Personnel. All Work performed under this Order shall be under the direction and supervision of qualified personnel. Within 30 days of the Effective Date of this Order, and before the Work outlined below begins, Respondents shall notify EPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants and laboratories to be used in carrying out such Work. With respect to any proposed contractor, Respondents shall demonstrate that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995, or most recent version), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001 or subsequently issued guidance) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondents shall be subject to EPA's review, for verification that such persons meet minimum technical

background and experience requirements. If EPA disapproves in writing of any person's technical qualifications, Respondents shall notify EPA of the identity and qualifications of the replacements within 30 days of the written notice. If EPA subsequently disapproves of the replacement, EPA reserves the right to terminate this Order and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondents. During the course of the RI/FS, Respondents shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing their names, titles, and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

30. Within 30 days after the Effective Date, Respondents shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondents required by this Order and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site Work. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number and qualifications within 14 days following EPA's disapproval. Respondents shall have the right to change their Project Coordinator, subject to EPA's right to disapprove. Respondents shall notify EPA seven (7) days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. Receipt by Respondents' Project Coordinator of any notice or communication from EPA relating to this Order shall constitute receipt by Respondents.

31. EPA has designated Bart Canellas, P.E. of the EPA Region 6 Superfund Division as its Remedial Project Manager ("RPM"). EPA will notify Respondents of a change of its designated RPM. Except as otherwise provided in this Order, Respondents shall direct all submissions required by this Order to the RPM at the US EPA Region 6, 6SF-RA, 1445 Ross Ave., Dallas, TX 75202 or by electronic mail if so directed by the RPM.

32. EPA's RPM shall have the authority lawfully vested in a Remedial Project Manager ("RPM") and On-Scene Coordinator ("OSC") by the NCP. In addition, EPA's RPM shall have the authority consistent with the NCP, to halt any Work required by this Order, and to take any necessary response action when s/he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA RPM from the area under study pursuant to this Order shall not be cause for the stoppage or delay of Work.

33. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. Section 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of EPA, but not to modify the RI/FS Work Plan.

## **IX. WORK TO BE PERFORMED**

34. Respondents shall conduct the RI/FS in accordance with the provisions of this Order, the SOW, CERCLA, the NCP and EPA guidance, including, but not limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive # 9355.3-01, October 1988 or subsequently issued guidance), "Guidance for Data Useability in Risk Assessment" (OSWER Directive #9285.7-05, October 1990 or subsequently issued guidance), and guidance referenced therein, and guidances referenced in the SOW, as may be amended or modified by EPA. The Remedial Investigation ("RI") shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. The Feasibility Study ("FS") shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site. The alternatives evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondents shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and Section 300.430(e) of the NCP, 40 C.F.R. § 300.430(e). Upon request by EPA, Respondents shall submit in electronic form all portions of any plan, report or other deliverable Respondents are required to submit pursuant to provisions of this Order.

35. Upon receipt of the draft Feasibility Study ("FS") report, the EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the durability, reliability and effectiveness of any proposed Institutional Controls.

36. Modification of the RI/FS Work Plan.

a. If at any time during the RI/FS process, Respondents identify a need for additional data, Respondents shall submit a memorandum documenting the need for additional data to the EPA RPM within fifteen (15) days of identification. The EPA in its discretion will determine whether the additional data will be collected by Respondents and whether it will be incorporated into plans, reports and other deliverables.

b. In the event of unanticipated or changed circumstances at the Site, Respondents shall notify the EPA RPM by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that the EPA determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the RI/FS Work Plan, the EPA shall modify or amend the RI/FS Work Plan in writing accordingly. Respondents shall perform the RI/FS Work Plan as modified or amended.



c. The EPA may determine that in addition to tasks defined in the initially approved RI/FS Work Plan, other additional Work may be necessary to accomplish the objectives of the RI/FS. Respondents agree to perform these response actions in addition to those required by the initially approved RI/FS Work Plan, including any approved modifications, if the EPA determines that such actions are necessary for a complete RI/FS.

d. Respondents shall confirm their willingness to perform the additional Work in writing to the EPA within 7 days of receipt of the EPA request. If Respondents object to any modification determined by the EPA to be necessary pursuant to this Paragraph, Respondents may seek dispute resolution pursuant to Section XV (Dispute Resolution). The SOW and/or RI/FS Work Plan shall be modified in accordance with the final resolution of the dispute.

e. Respondents shall complete the additional Work according to the standards, specifications, and schedule set forth or approved by the EPA in a written modification to the RI/FS Work Plan or written RI/FS Work Plan supplement. The EPA reserves the right to conduct the Work itself at any point, to seek reimbursement from Respondents, and/or to seek any other appropriate relief.

f. Nothing in this Paragraph shall be construed to limit the EPA's authority to require performance of further response actions at the Site.

**37. Off-Site Shipment of Waste Material.** Respondents shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the EPA's Designated Project Coordinator. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

a. Respondents shall include in the written notification the following information: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

b. The identity of the receiving facility and state will be determined by Respondents following the award of the contract for the remedial investigation and feasibility study. Respondents shall provide the information required by Subparagraph 37.a and 37.c as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

c. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondents shall obtain the EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section

121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

38. Meetings. Respondents shall make presentations at, and participate in, meetings at the request of the EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at the EPA's discretion.

39. Progress Reports. In addition to the plans, reports and other deliverables set forth in this Order, Respondents shall provide to the EPA monthly progress reports by the \_\_\_th day of the following month. At a minimum, with respect to the preceding month, these progress reports shall (1) describe the actions which have been taken to comply with this Order during that month, (2) include all results of sampling and tests and all other data received by Respondents, (3) describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion, and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

40. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence during performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action. Respondents shall take these actions in accordance with all applicable provisions of this Settlement Agreement and Order on Consent, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the EPA Project Coordinator or, the Regional Duty Officer at (866) 372-7745 of the incident or Site conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and the EPA takes such action instead, Respondents shall reimburse the EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payment of Response Costs).

b. In addition, in the event of any release of a hazardous substance from the Site, Respondents shall immediately notify the EPA Project Coordinator, the OSC or Regional Duty Officer at (866) 372-7745 and the National Response Center at (800) 424-8802. Respondents shall submit a written report to the EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

## **X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS**

41. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Order, in a notice to Respondents the EPA will: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondents modify the submission; or (e) any combination of the above. However, the EPA shall not modify a submission without first providing Respondents at least one notice of deficiency and an opportunity to cure within fifteen (15 days), except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

42. In the event of approval, approval upon conditions, or modification by the EPA, pursuant to Subparagraph 41(a), (b), (c) or (e), Respondents shall proceed to take any action required by the plan, report or other deliverable, as approved or modified by the EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XV (Dispute Resolution) with respect to the modifications or conditions made by the EPA. Following EPA approval or modification of a submission or portion thereof, Respondents shall not thereafter alter or amend such submission or portion thereof unless directed by the EPA. In the event that the EPA modifies the submission to cure the deficiencies pursuant to Subparagraph 41(c) and the submission had a material defect, the EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties).

### **43. Resubmission.**

a. Upon receipt of a notice of disapproval, Respondents shall, within fifteen (15) days or such longer time as specified by the EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVI, shall accrue during the 15-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 41 and 42.

b. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by the EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for stipulated penalties under Section XVI (Stipulated Penalties).

c. Respondents shall not proceed further with any subsequent activities or tasks until receiving EPA approval, approval on condition or modification of the following deliverables: RI/FS Work Plan and Sampling and Analysis Plan, Draft Remedial Investigation Report and Treatability Testing Work Plan and Sampling and Analysis Plan and Draft Feasibility Study Report. While awaiting EPA approval, approval on condition or modification of these deliverables, Respondents shall proceed with all other tasks and activities which may be conducted independently of these deliverables, in accordance with the schedule set forth under

this Order.

d. For all remaining deliverables not listed above in subparagraph 43.c., Respondents shall proceed with all subsequent tasks, activities and deliverables without awaiting EPA approval on the submitted deliverable. The EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.

44. If the EPA disapproves a resubmitted plan, report or other deliverable, or portion thereof, the EPA may again direct Respondents to correct the deficiencies. The EPA shall also retain the right to modify or develop the plan, report or other deliverable. Respondents shall implement any such plan, report, or deliverable as corrected, modified or developed by the EPA, subject only to Respondents' right to invoke the procedures set forth in Section XV (Dispute Resolution).

45. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by the EPA due to a material defect, Respondents shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless Respondents invoke the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and the EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by the EPA or superceded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If the EPA's disapproval or modification is not otherwise revoked, substantially modified or superceded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.

46. In the event the EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondents shall incorporate and integrate information supplied by the EPA into the final reports.

47. All plans, reports, and other deliverables submitted to the EPA under this Order shall, upon approval or modification by the EPA, be incorporated into and enforceable under this Order. In the event the EPA approves or modifies a portion of a plan, report, or other deliverable submitted to the EPA under this Order, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement and Order on Consent.

48. Neither failure of the EPA to expressly approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by the EPA. Whether or not the EPA gives express approval for Respondents' deliverables, Respondents are responsible for preparing deliverables acceptable to the EPA.

## **XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION**

49. Quality Assurance. Respondents shall assure that Work performed, samples taken and analyses conducted conform to the requirements of the SOW, the QAPP and guidances identified therein. Respondents will assure that field personnel used by Respondents are properly trained in the use of field equipment and in chain of custody procedures. Respondents shall only use laboratories which have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA.

50. Sampling.

a. All results of sampling, tests, modeling or other data (including raw data) generated by Respondents, or on Respondents' behalf, during the period that this Order is effective, shall be submitted to the EPA in the next monthly progress report as described in Paragraph 39 of this Settlement Agreement and Order on Consent. The EPA will make available to Respondents validated data generated by the EPA unless it is exempt from disclosure by any federal or state law or regulation.

b. Respondents shall verbally notify the EPA at least seven (7) days prior to conducting significant field events as described in the SOW, RI/FS Work Plan or Sampling and Analysis Plan. At the EPA's verbal or written request, or the request of the EPA's oversight assistant, Respondents shall allow split or duplicate samples to be taken by the EPA (and its authorized representatives) of any samples collected in implementing this Order. All split samples of Respondents shall be analyzed by the methods identified in the QAPP.

51. Access to Information.

a. Respondents shall provide to the EPA, upon request, copies of all documents and information within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondents shall also make available to the EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

b. Respondents may assert business confidentiality claims covering part or all of the documents or information submitted to the EPA under this Order to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by the EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when it is submitted to the EPA, or if the EPA has notified Respondents that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondents. Respondents shall

segregate and clearly identify all documents or information submitted under this Order for which Respondents assert business confidentiality claims.

c. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondents assert such a privilege in lieu of providing documents, they shall provide the EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondents. However, no documents, reports or other information created or generated pursuant to the requirements of this Order shall be withheld on the grounds that they are privileged.

d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

52. In entering into this Settlement Agreement and Order on Consent, Respondents waive any objections to any data gathered, generated, or evaluated by the EPA, the State or Respondents in the performance or oversight of the Work that has been verified according to the quality assurance/quality control ("QA/QC") procedures required by the Order or any EPA-approved RI/FS Work Plans or Sampling and Analysis Plans. If Respondents object to any other data relating to the RI/FS, Respondents shall submit to the EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to the EPA within 15 days of the monthly progress report containing the data.

## **XII. SITE ACCESS AND INSTITUTIONAL CONTROLS**

53. If the Site, or any other property where access is needed to implement this Order, is owned or controlled by any of Respondents, such Respondents shall, commencing on the Effective Date, provide the EPA and its representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Order.

54. Where any action under this Settlement Agreement and Order on Consent is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain all necessary access agreements within 30 days after the Effective Date, or as otherwise specified in writing by the EPA Project Coordinator. Respondents shall immediately notify the EPA if after using their best efforts they are unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. Respondents shall describe in writing their efforts to obtain access. If Respondents cannot obtain access agreements, the EPA may either (i)

obtain access for Respondents or assist Respondents in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as the EPA deems appropriate; (ii) perform those tasks or activities with EPA contractors; or (iii) terminate the Order. Respondents shall reimburse the EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs). If the EPA performs those tasks or activities with EPA contractors and does not terminate the Order, Respondents shall perform all other tasks or activities not requiring access to that property, and shall reimburse the EPA for all costs incurred in performing such tasks or activities. Respondents shall integrate the results of any such tasks or activities undertaken by the EPA into its plans, reports and other deliverables.

55. Notwithstanding any provision of this Settlement Agreement and Order on Consent, the EPA retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

### **XIII. COMPLIANCE WITH OTHER LAWS**

56. Respondents shall comply with all applicable local, state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-site and requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Order is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

### **XIV. RETENTION OF RECORDS**

57. During the pendency of this Settlement Agreement and Order on Consent and for a minimum of 10 years after commencement of construction of any remedial action, each Respondent shall preserve and retain all non-identical copies of documents, records, and other information (including documents, records, or other information in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 10 years after commencement of construction of any remedial action, Respondents shall also instruct their contractors and agents to preserve all documents, records, and other information of whatever kind, nature or description relating to performance of the Work.

58. At the conclusion of this document retention period, Respondents shall notify the EPA at least 90 days prior to the destruction of any such documents, records or other information, and, upon request by the EPA, Respondents shall deliver any such documents, records, or other information to the EPA. Respondents may assert that certain documents, records, and other information are privileged under the attorney-client privilege or any other

privilege recognized by federal law. If Respondents assert such a privilege, they shall provide the EPA with the following: 1) the title of the document, record, or other information; 2) the date of the document, record, or other information; 3) the name and title of the author of the document, record, or other information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or other information; and 6) the privilege asserted by Respondents. However, no documents, records or other information created or generated pursuant to the requirements of this Order shall be withheld on the grounds that they are privileged.

59. Each Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by the EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

## **XV. DISPUTE RESOLUTION**

60. Unless otherwise expressly provided for in this Settlement Agreement and Order on Consent, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement and Order on Consent. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement and Order on Consent expeditiously and informally.

61. If Respondents object to any EPA action taken pursuant to this Settlement Agreement and Order on Consent, including billings for Future Response Costs, they shall notify the EPA in writing of their objection(s) within 30 days of such action, unless the objection(s) has/have been resolved informally. The EPA and Respondents shall have 60 days from the EPA's receipt of Respondents' written objection(s) to resolve the dispute (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of the EPA. Such extension may be granted verbally but must be confirmed in writing.

62. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement and Order on Consent. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Division Director level or higher will issue a written decision. The EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement and Order on Consent. Respondents' obligations under this Settlement Agreement and Order on Consent shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with the EPA's decision, whichever occurs, and regardless of whether Respondents agree with the decision.



## **XVI. STIPULATED PENALTIES**

63. Respondents shall be liable to the EPA for stipulated penalties in the amounts set forth in Paragraphs 64 and 65 for failure to comply with any of the requirements of this Order specified below unless excused under Section XVII (Force Majeure). "Compliance" by Respondents shall include completion of the Work under this Settlement Agreement and Order on Consent or any activities contemplated under any RI/FS Work Plan or other plan approved under this Order identified below, in accordance with all applicable requirements of law, this Order, the SOW, and any plans or other documents approved by the EPA pursuant to this Order and within the specified time schedules established by and approved under this Settlement Agreement and Order on Consent.

### **64. Stipulated Penalty Amounts - Work.**

a. The following stipulated penalties shall accrue per day for any noncompliance identified in Subparagraph 64(b):

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 1500	1 <sup>st</sup> through 14 <sup>th</sup> day
\$ 2000	15 <sup>th</sup> through 30 <sup>th</sup> day
\$ 2500	31 <sup>st</sup> day and beyond

### **b. Compliance Milestones**

1. Payment of Future Response Costs
2. Establishment of Escrow Accounts in the event of Disputes
3. Implementation of the Work Plan in accordance with the schedule provided in the plan and in the SOW.
4. Implementation of the Sampling and Analysis Plan in accordance with the schedule provided in the plan and in the SOW.
5. Completion of Site Characterization in accordance with the provisions and schedule in the Work Plan and SOW.

### **65. Stipulated Penalty Amounts - Reports.**

a. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports or other written documents pursuant to Paragraphs 34 through 39:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
--------------------------------------	--------------------------------

\$ 1500	1 <sup>st</sup> through 14 <sup>th</sup> day
\$ 2000	15 <sup>th</sup> through 30 <sup>th</sup> day
\$ 2500	31 <sup>st</sup> day and beyond

66. In the event that the EPA assumes performance of a portion or all of the Work pursuant to Paragraph 83 of Section XX (Reservation of Rights by the EPA), Respondents shall be liable for a stipulated penalty in the amount of \$500,000.

67. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section X (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31<sup>st</sup> day after the EPA's receipt of such submission until the date that the EPA notifies Respondents of any deficiency; and (2) with respect to a decision by the EPA Management Official designated in Paragraph 62 of Section XV (Dispute Resolution), during the period, if any, beginning on the 21<sup>st</sup> day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement and Order on Consent.

68. Following the EPA's determination that Respondents have failed to comply with a requirement of this Settlement Agreement and Order on Consent, the EPA may give Respondents written notification of the same and describe the noncompliance. The EPA may send Respondents a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether the EPA has notified Respondents of a violation.

69. All penalties accruing under this Section shall be due and payable to the EPA within 30 days of Respondents' receipt from the EPA of a demand for payment of the penalties, unless Respondents invoke the dispute resolution procedures in accordance with Section XV (Dispute Resolution). All payments to the EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to the U.S. Environmental Protection Agency, Superfund Payments, Cincinnati Finance Center, P.O. Box 979076, St. Louis, MO 63197-9000, shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number A6X7, the EPA Docket Number \_\_\_\_\_, and the name and address of the party(ies) making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s) shall be sent to the EPA as provided in Paragraph 31, and to Ms. Doretha Christian, U.S. EPA Region 6, 6SF-TE, 1445 Ross Avenue, Dallas, TX 75202.

70. The payment of penalties shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement Agreement and Order on

Consent.

71. Penalties shall continue to accrue as provided in Paragraph 67 during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of the EPA's decision.

72. If Respondents fail to pay stipulated penalties when due, the EPA may institute proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 69.

73. Nothing in this Settlement Agreement and Order on Consent shall be construed as prohibiting, altering, or in any way limiting the ability of the EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement Agreement and Order on Consent or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that the EPA shall not seek civil penalties pursuant to Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of willful violation of this Order or in the event that the EPA assumes performance of a portion or all of the Work pursuant to Section XX (Reservation of Rights by the EPA), Paragraph 84. Notwithstanding any other provision of this Section, the EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement and Order on Consent.

## **XVII. FORCE MAJEURE**

74. Respondents agree to perform all requirements of this Order within the time limits established under this Order, unless the performance is delayed by a *force majeure*. For purposes of this Order, *force majeure* is defined as any event arising from causes beyond the control of Respondents or of any entity controlled by Respondents, including but not limited to their contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement and Order on Consent despite Respondents' best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

75. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement and Order on Consent, whether or not caused by a *force majeure* event, Respondents shall notify the EPA orally within 48 hours of when Respondents first knew that the event might cause a delay. Within 14 days thereafter, Respondents shall provide to the EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents' rationale for attributing such delay to a *force majeure*

event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondents from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

76. If the EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Order that are affected by the *force majeure* event will be extended by the EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If the EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, the EPA will notify Respondents in writing of its decision. If the EPA agrees that the delay is attributable to a *force majeure* event, the EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

### **XVIII. PAYMENT OF RESPONSE COSTS**

77. Payment for Past Response Costs. Although payment for past response costs are not sought in this Settlement Agreement, the EPA hereby reserves its right to seek past response costs in any subsequent administrative and/or judicial settlement agreement or action.

78. Payments of Future Response Costs.

a. Within 30 days of the Effective Date, Respondents shall pay to EPA \$\_\_\_\_\_ in prepayment of Future Response Costs. The total amount paid shall be deposited by EPA in the Wilcox Oil Future Response Costs Special Account within the EPA Hazardous Substance Superfund. These funds shall be retained and used by EPA to conduct or finance Future Response Actions. Payment shall be made by EPA FedWire Electronic Funds Transfer ("EFT"), to:

Federal Reserve Bank of New York  
ABA = 021030004  
Account = 68010727  
SWIFT address = FRNYUS33  
33 Liberty Street  
New York, New York 10045

Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency." The message should be accompanied by appropriate transmittal communication identifying the name and address of the part(ies) making payment, the EPA Site/Spill ID number \_\_\_\_\_ and the EPA docket number for this action.

b. At the time of payment, Respondents shall send notice that payment has been made to:

Chief, Enforcement Assessment Section (6SF-TE)  
US EPA, Region 6  
1445 Ross Avenue, Suite 1200  
Dallas, Texas 75202-2733

and to the EPA Cincinnati Finance Office by e-mail at [acctsreceivable.cinwd@epa.gov](mailto:acctsreceivable.cinwd@epa.gov), or by mail to:

EPA Cincinnati Finance Office  
26 West Martin Luther King Drive  
Cincinnati, Ohio 45268

c. Respondents shall pay to EPA all Future Response Costs not inconsistent with the National Contingency Plan. On a periodic basis, the United States will send Respondents a bill requiring payment that includes a Standard Cost Accounting Report (SCORPIOS), which includes direct and indirect costs incurred by EPA and its contractors and the United States Department of Justice. Respondents shall make all payments required by this Paragraph in the manner required by Subparagraph 78.a with notice as required by Subparagraph 78.b. The total amount paid will be deposited by EPA in the Wilcox Oil Future Response Costs Special Account within the EPA Hazardous Substance Superfund. These funds will be retained and used by EPA to conduct or finance future response actions. Any amounts remaining in the Wilcox Oil Future Response Costs Special Account will be disbursed or credited in accordance with Subparagraph 78.e.

d. In the event that EPA's use of the Wilcox Oil Future Response Costs Special Account results in there being \$\_\_\_\_\_ or less in the Wilcox Oil Future Response Costs Special Account at any time, Respondents agree, within 14 days or less, to remit to EPA \$\_\_\_\_\_ for deposit in the Wilcox Oil Future Response Costs Special Account, in accordance with the payment procedure described in Subparagraph 78.a and 78.b. Any amounts received under this Subparagraph will be credited to Respondents in the final accounting in Subparagraph 78.e.

e. After EPA issues its written Certification of Completion of Work and EPA has performed a final accounting of Future Response Costs, EPA shall offset the final bill for Future Response Costs by the unused amount paid by the Respondents pursuant to Subparagraph 78.a. or 78.d.

f. If Respondents do not pay Future Response Costs within 30 days after Respondents' receipt of a bill, Respondents shall pay Interest on the unpaid balance. The Interest on unpaid Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If EPA receives a partial payment, Interest shall accrue on any unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including but not limited to, payments of stipulated penalties pursuant to Section **Error! Reference source not found.** Respondents shall make all payments required by this Paragraph in the manner described in Paragraph 78.a.

79. Respondents may contest payment of any Future Response Costs under Paragraph 78 that were incurred during the time period that any prepaid amounts were received under Subparagraph 78.c with the exception of amounts due under Paragraphs 78.a or 78.d if they determine that the United States (or the State) has made a mathematical error or if they allege that a cost item that is included represents costs that are inconsistent with the NCP or outside the definition of Future Response Costs.

80. Respondents may contest payment of any Future Response Costs billed under Paragraph 78 if they determine that the EPA has made an accounting error or if they believe the EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the EPA Project Coordinator. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondents shall within the 30 day period pay all uncontested Future Response Costs to the EPA in the manner described in Paragraph 79. Simultaneously, Respondents shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Texas and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to the EPA Project Coordinator a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondents shall initiate the Dispute Resolution procedures in Section XV (Dispute Resolution). If the EPA prevails in the dispute, within 5 days of the resolution of the dispute, Respondents shall pay the sums due (with accrued interest) to the EPA in the manner described in Paragraph 78. If Respondents prevail concerning any aspect of the contested costs, Respondents shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to the EPA in the manner described in Paragraph 78. Respondents shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse the EPA for its Future Response Costs.

## **XIX. COVENANT NOT TO SUE BY EPA**

81. In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, the EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work performed under this Order and for recovery of Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondents of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XVIII. This covenant not to sue extends only to Respondents and does not extend to any other person.

## **XX. RESERVATIONS OF RIGHTS BY EPA**

82. Except as specifically provided in this Order, nothing herein shall limit the power and authority of the EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent the EPA from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.

83. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. The EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to:

- a. claims based on a failure by Respondents to meet a requirement of this Settlement Agreement;
- b. liability for costs not included within the definition of Future Response Costs;
- c. liability for performance of response action other than the Work;
- d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

84. Work Takeover. In the event the EPA determines that Respondents have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner which may cause an endangerment to human health or the environment, the EPA may assume the performance of all or any portion of the Work as the EPA determines necessary. Respondents may invoke the procedures set forth in Section XV (Dispute Resolution) to dispute the EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the EPA in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondents shall pay pursuant to Section XVIII (Payment of Response Costs). Notwithstanding any other provision of this Order, the EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

## **XXI. COVENANT NOT TO SUE BY RESPONDENTS**

85. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement and Order on Consent, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of the Work or arising out of the response actions for which the Future Response Costs have or will be incurred, including any claim under the United States Constitution, the Texas Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or payment of Future Response Costs.

86. These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 83 (b), (c), and (e) - (g), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

87. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

## **XXII. OTHER CLAIMS**

88. By issuance of this Settlement Agreement and Order on Consent, the United States and the EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents.



89. Except as expressly provided in Section XIX (Covenant Not to Sue by EPA), nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

90. No action or decision by the EPA pursuant to this Settlement Agreement and Order on Consent shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

### **XXIII. CONTRIBUTION**

#### **91. Contribution**

a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. 9613(f)(2) that Respondents are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work, and Future Response Costs.

b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. 9613(f)(3)(B) pursuant to which Respondents have, as of the Effective Date, resolved their liability to the United States for the Work, Past Response Costs and Future Response Costs.

c. Except as provided in Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement precludes the United States or Respondents from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any persons not parties to this Settlement Agreement. Nothing herein diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. 9613(f)(2)(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

### **XXIV. INDEMNIFICATION**

92. Respondents shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement and Order on Consent. In addition, Respondents agree to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on

account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement and Order on Consent. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Order. Neither Respondents nor any such contractor shall be considered an agent of the United States.

93. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

94. Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site.

## **XXV. INSURANCE**

95. At least 30 days prior to commencing any On-Site Work under this Settlement Agreement and Order on Consent, Respondents shall secure, and shall maintain for the duration of this Order, comprehensive general liability insurance and automobile insurance with limits of \$5,000,000 dollars, combined single limit, naming the EPA as an additional insured. Within the same period, Respondents shall provide the EPA with certificates of such insurance and a copy of each insurance policy. Respondents shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement and Order on Consent, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondents in furtherance of this Order. If Respondents demonstrate by evidence satisfactory to the EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondents need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

## **XXVI. FINANCIAL ASSURANCE**

96. Within 30 days of the Effective Date, Respondents shall establish and maintain financial security for the benefit of the EPA in the amount of \$ 2,000,000 in one or more of the following forms, in order to secure the full and final completion of Work by Respondents:

a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;

b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to the EPA equaling the total estimated cost of the Work;

c. a trust fund administered by a trustee acceptable in all respects to the EPA;

d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work;

e. a corporate guarantee to perform the Work provided by one or more parent corporations or subsidiaries of Respondents, or by one or more unrelated corporations that have a substantial business relationship with at least one of Respondents; including a demonstration that any such company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); and/or

f. a corporate guarantee to perform the Work by one or more of Respondents, including a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

97. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to the EPA, determined in the EPA's sole discretion. In the event that the EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondents shall, within 30 days of receipt of notice of the EPA's determination, obtain and present to the EPA for approval one of the other forms of financial assurance listed in Paragraph 96, above. In addition, if at any time the EPA notifies Respondents that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondents shall obtain and present to the EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondents' inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement and Order on Consent.

98. If Respondents seek to ensure completion of the Work through a guarantee pursuant to Subparagraph 96.e. or 96.f. of this Settlement Agreement and Order on Consent, the relevant Settling Defendants shall also comply with the other relevant requirements of 40 C.F.R. § 264.143(f) relating to these mechanisms unless otherwise provided in this Consent Decree, including but not limited to: (a) the initial submission of required financial reports and statements from the relevant entity's chief financial officer ("CFO") and independent certified public accountant ("CPA"), in the form prescribed by EPA in its financial test sample CFO letters and CPA reports available at: <http://www.epa.gov/compliance/resources/policies/cleanup/superfund/fa-test-samples.pdf>; (b) the annual resubmission of such reports and statements within 90 days after the close of each

such entity's fiscal year; and (c) the prompt notification of EPA after each such entity determines that it no longer satisfies the financial test requirements set forth at 40 C.F.R. § 264.143(f)(1) and in any event within 90 days after the close of any fiscal year in which such entity no longer satisfies such financial test requirements. For purposes of the performance guarantee mechanisms specified in this Section XXVI, references in 40 C.F.R. Part 264, Subpart H, to "closure," "post-closure," and "plugging and abandonment" shall be deemed to include the Work; the terms "current closure cost estimate," "current post-closure cost estimate," and "current plugging and abandonment cost estimate" shall be deemed to include the Estimated Cost of the Work; the terms "owner" and "operator" shall be deemed to refer to each Settling Defendant making a demonstration under Paragraph 96.e; and the terms "facility" and "hazardous waste facility" shall be deemed to include the Site.

99. If, after the Effective Date, Respondents can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 97 of this Section, Respondents may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondents shall submit a proposal for such reduction to the EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from the EPA. In the event of a dispute, Respondents may seek dispute resolution pursuant to Section XV (Dispute Resolution). Respondents may reduce the amount of security in accordance with the EPA's written decision resolving the dispute.

100. Respondents may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by the EPA, provided that the EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondents may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

Funding for Work Takeover. The commencement of any Work Takeover pursuant to Paragraph **Error! Reference source not found.** shall trigger EPA's right to receive the benefit of any performance guarantee(s) provided pursuant to Paragraphs **Error! Reference source not found.**, **Error! Reference source not found.**, **Error! Reference source not found.**, **Error! Reference source not found.**, or 96.e, and at such time EPA shall have immediate access to resources guaranteed under any such performance guarantee(s), whether in cash or in kind, as needed to continue and complete the Work assumed by EPA under the Work Takeover. Upon the commencement of any Work Takeover, if (a) for any reason EPA is unable to promptly secure the resources guaranteed under any such performance guarantee(s), whether in cash or in kind, necessary to continue and complete the Work assumed by EPA under the Work Takeover, or (b) in the event that the performance guarantee involves a demonstration of satisfaction of the financial test criteria pursuant to Paragraph **Error! Reference source not found.** or Paragraph 96.f, Settling Defendants (or in the case of Paragraph 96.e, the guarantor) shall immediately upon written demand from EPA deposit into a special account within the EPA Hazardous Substance Superfund or such other account as EPA may specify, in immediately

available funds and without setoff, counterclaim, or condition of any kind, a cash amount up to but not exceeding the estimated cost of completing the Work as of such date, as determined by EPA. In addition, if at any time EPA is notified by the issuer of a performance guarantee that such issuer intends to cancel the performance guarantee mechanism it has issued, then, unless Settling Defendants provide a substitute performance guarantee mechanism in accordance with this Section **Error! Reference source not found.** no later than 30 days prior to the impending cancellation date, EPA shall be entitled (as of and after the date that is 30 days prior to the impending cancellation) to draw fully on the funds guaranteed under the then-existing performance guarantee. All EPA Work Takeover costs not reimbursed under this Paragraph shall be reimbursed under Section XVIII (Payment of Response Costs).

## **XXVII. INTEGRATION/APPENDICES**

101. This Settlement Agreement and Order on Consent and its appendices and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Settlement Agreement and Order on Consent and become incorporated into and enforceable under this Settlement Agreement and Order on Consent constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement and Order on Consent. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement and Order on Consent. The following appendices are attached to and incorporated into this Order:

“Appendix A” is the list of Respondents.

“Appendix B is the SOW of the Site.

“Appendix C” is the map of the Site.

## **XXVIII. ADMINISTRATIVE RECORD**

102. The EPA will determine the contents of the administrative record file for selection of the remedial action. Respondents shall submit to the EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Upon request of the EPA, Respondents shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports. Upon request of the EPA, Respondents shall additionally submit any previous studies conducted under state, local or other federal authorities relating to selection of the response action, and all communications between Respondents and state, local or other federal authorities concerning selection of the response action. At the EPA's discretion, Respondents shall establish a community information repository at or near the Site, to house one copy of the administrative record.

## **XXIX. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION**

103. This Settlement Agreement shall be effective on the day this Settlement Agreement and Order on Consent is signed by the Superfund Division Director.

104. This Settlement Agreement and Order on Consent may be amended by mutual agreement of the EPA and Respondents. Amendments shall be in writing and shall be effective when signed by the EPA. EPA Project Coordinators do not have the authority to sign amendments to the Order.

105. No informal advice, guidance, suggestion, or comment by the EPA Project Coordinator or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement Agreement and Order on Consent, or to comply with all requirements of this Order, unless it is formally modified.

## **XXX. NOTICE OF COMPLETION OF WORK**

106. When the EPA determines that all Work has been fully performed in accordance with this Settlement Agreement and Order on Consent, with the exception of any continuing obligations required by this Settlement Agreement and Order on Consent, including but not limited to payment of Future Response Costs or record retention, the EPA will provide written notice to Respondents. If the EPA determines that any such Work has not been completed in accordance with this Settlement Agreement and Order on Consent, the EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the RI/FS Work Plan if appropriate in order to correct such deficiencies, in accordance with Paragraph 36 (Modification of the Work Plan). Failure by Respondents to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement Agreement and Order on Consent.

Agreed this \_\_\_\_ day of \_\_\_\_\_, 2014.

For Respondent \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

It is so ORDERED AND AGREED this \_\_\_\_\_ day of \_\_\_\_\_, 2014.

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

Director, Superfund Division

Region 6

U.S. Environmental Protection Agency

EFFECTIVE DATE: \_\_\_\_\_

**ENCLOSURE 3**

**DRAFT SETTLEMENT OF WORK (SOW) FOR RI/FS**



**ENCLOSURE 3**  
**DRAFT STATEMENT OF WORK (SOW) FOR RI/FS**

Purpose of the Statement of Work

This Draft Statement of Work (SOW) sets forth certain requirements of the Administrative Order on Consent (AOC) for implementation of the Work pertaining to a Remedial Investigation and Feasibility Study (RI/FS) for the Wilcox Oil Company Refinery Site (hereinafter "the Site"). The PRP (or selected contractor) shall undertake the RI/FS according to the AOC, including, but not limited to, this SOW.

Objectives of the Remedial Investigation/Feasibility Study

The objectives of the RI/FS are to investigate the nature and extent of contamination at the Site to evaluate the potential risk to human health and the environment, and to develop and evaluate potential remedial alternatives, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, 42 U.S.C. § 9601, et seq.); as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA); and in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (National Contingency Plan [NCP]). Specifically, these objectives are to determine the presence or absence, types, and quantities (concentrations) of contaminants; mechanism of contaminant release to pathway(s); direction-of-pathway(s) transport; boundaries of source(s) and pathway(s); environmental/public health receptors; and the potential risks to those receptors.

Scope of the Remedial Investigation and Feasibility Study

The general scope of the RI/FS shall be to address all contamination at the Site resulting from the hazardous substances present at the Site.

Description of the Site

Wilcox Oil Company is an inactive and abandoned oil refinery located in Creek County, Oklahoma. The site consists of contaminated areas and surface water bodies due to the release from the former Lorraine and former Wilcox Refineries. These refineries were located in the N ½ of the NW ¼ of S29 T16N R9E and the SW ¼ of the SW ¼ of S20 T16N R9E in Creek County, Oklahoma.

The geographical coordinates for the site are 35°50'26.8966" north latitude and 96°22'48.693" west longitude. The property covers approximately 125 acres.

Two refinery process facilities and storage tank areas once operated at the two facilities. Recent investigations (2009-2011) indicate the site area contains elevated concentrations of metals and organic compounds in the former storage tank areas, surface soils, surface impoundment and sediments. Levels of metals and/or oily non aqueous phase liquid (NAPLs) were also detected in three private residential wells on site, and from three wells adjacent to the property. A former church facility and six residents are presently on the Site.

A large volume of visible waste is present where refined product and crude oil storage tanks were once located. Approximately 4 inches of crude oil were discovered on the former church property when a cap broke off an existing pipeline. Hydrocarbon sheen was visible when digging 2-3 feet below ground surface. Elevated levels of metals and semi-volatiles are present in waste samples collected.

The site includes remnants of former oil refining operations and tank farms. The facility can be divided into three major former operational areas: two processing areas with surrounding refined product storage and a crude oil storage area. An active railroad divides the two former processing areas and product storage areas. Most of the refinery structures and tanks have been removed or are in ruins. The northwestern portion of the property, west of the railroad and north of West 221st Street South/Refinery Road, was used as a refined product storage area but is now rural land no longer used for refinery storage purposes. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste of a hydrocarbon nature.

A detailed title search in the Creek County Clerk office confirms that the property was used in oil refinery operations from 1915 until November 1963.

#### Role of EPA and the State

Unless identified otherwise, the EPA is the lead agency for this RI/FS investigation and the State, as represented by the Oklahoma Department of Environmental Quality (ODEQ), will serve as the support Agency. The EPA reserves the right to reverse these roles and delegated to the ODEQ the lead agency role.

The lead agency's (EPA's) approval of deliverables, including, but not limited to, submissions, is administrative in nature, and allows the PRP (or selected contractor) to proceed to the next steps in implementing the work of the RI/FS. The agency's approval does not imply any warranty of performance, nor does it imply that the RI/FS, when completed, will meet Performance Standards nor does it imply that the RI/FS will function properly and be ultimately accepted by the EPA. The EPA retains the right to disapprove submissions during the RI/FS.

#### Tasks to be Performed, Deliverables and Schedule

This SOW specifies the work to be performed and the deliverables which shall be produced by the PRP (or selected contractor). The RI/FS shall be conducted in accordance with this SOW and all applicable guidance that the EPA uses in conducting RI/FS projects under CERCLA, as amended by SARA, as well as any additional requirements by the State.

All draft and final deliverables specified in this SOW shall be provided in hard copy and electronic format, by the PRP (or selected contractor), to the EPA (three hard copies), and the ODEQ (two hard copies), and the Natural Resource Trustees' identified by the U.S. Department of the Interior (one hard copy each). Draft and Final deliverables shall be provided to these entities in Adobe® PDF *format*. Final deliverables shall be provided in hard copy and electronic format (specifically, Adobe® PDF format) to the Information Repository(ies) established for the

Site. Additionally, all deliverables specified in this SOW shall be submitted, by the PRP (or selected contractor), according to the requirements of this SOW.

Additionally, all deliverables specified shall be submitted, by the PRP (or selected contractor), according to the schedule presented in this SOW. See Appendix B (Acronyms, List of Deliverables and Schedule)

The PRP (or selected contractor) shall compile and review all existing Site data to describe additional data needed to characterize the Site, to better define potential applicable or relevant and appropriate requirements (ARARs), and to develop a range of preliminary identified remedial alternatives. This includes:

- o All existing information describing hazardous substance sources on and near the Site (impoundments, lagoons, tanks, landfills and media etc.), migration pathways, and potential human and environmental receptors.
- o Data describing all known sources, their location, containment, boundaries, physical characteristics and chemical constituents and their concentrations.
- o Data relating to past disposal practices of any kind on and near the Site.  
Data concerning the physical and chemical characteristics of the hazardous substances, and their distribution among environmental media (ground water, soil (surface and subsurface), surface water and air) on and near the Site.
- o Data from previous responses and cleanup activities.
- o Data from any previous sampling events on and near the Site.
- o Data to identify location and use of wells on and near the Site.
- o Data regarding background levels in the different environmental media.
- o Data regarding demographics, and land use (present and future).
- o Information regarding geology, hydrology, meteorology, and ecology of the Site.
- o Information regarding groundwater and surface water use on and near the Site.
- o Data describing the flora and fauna of the Site, threatened, endangered, or rare species, sensitive environmental areas, or critical habitats on or near the Site.

This SOW identifies typical activities the PRP (or selected contractor) may perform, but are not limited to the group shown. The work plan to be developed and submitted will include the above data and information as the site background and setting. The work plan will also provide a comprehensive description of the work to be performed, the methodologies to be utilized, and a corresponding schedule for completion. In addition, the work plan shall include the rationale for performing the required activities to obtain any missing data or information.

Specific required deliverables are identified within this SOW using “bold” and “italic”.

The EPA may grant additional time to revise the deliverables depending upon the nature of the comments and the deliverable.

Tasks to be Performed by the PRP (or selected contractor)

The PRP (or selected contractor) shall perform each of the following Tasks (Tasks 1-14) as specified in this SOW, unless otherwise noted. These Tasks shall be developed in accordance with the guidance documents listed within this SOW and in Appendix A (Guidance Documents) to this SOW, and any additional guidance applicable to the RI/FS process.

The PRP (or selected contractor) shall furnish personnel, services, materials and equipment required to perform RI/FS activities in accordance with all applicable regulations and guidance including but not limited to OSWER Directive 9355.3-01, 10-88 (Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA). The following work breakdown structure shall be used for project scoping, scheduling, reporting, technical and cost tracking.

### **TASK 1 PROJECT PLANNING AND SUPPORT**

This task includes work efforts related to project initiation and support. Typical activities the PRP (or selected contractor) may perform include but are not limited to:

- o Attend scoping meeting.

***Scoping meeting to occur within thirty (30) days after the effective date of the AOC.***

- o Conduct site visit.
- o Develop work plan and associated cost estimate.

In developing the draft RI/FS Work Plan, the PRP (or selected contractor) must include and discuss the following main topics:

- Project Scope and Objectives
- Site Background and Setting
- Initial Evaluation (sources, types and volumes of waste, pathways, and receptors)
- Rationale and Work Plan Approach ( Data Quality Objectives (DQOs), and Major Decisions)
- Tasks to be performed
- Schedule

***Draft RI/FS Work Plan due within sixty (60) days after the scoping meeting. Amended Draft Work Plan within thirty (30) days after the receipt of the EPA's comments. Final Work Plan due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft RI/FS Work Plan.***

- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Evaluate existing data as directed by EPA.
- o Develop a conceptual understanding of the site based on the evaluation of existing data (submit a Conceptual Site Model (CSM) sketch or diagram).

o The CSM identifies the sources of contamination, media, exposure pathways, and receptors that might be exposed. This is used in facilitating cleanup decisions during a site investigation and to plan the collection of data to support the risk assessment.

***Draft Conceptual Site Model to be included with the Draft RI/FS Work Plan and subsequent revisions (Amended and Final Work Plan).***

- o Identify likely response scenarios and potentially applicable technologies and operable units that may address site problems (submit Technical Memorandum).
- o Prepare conceptual exposure pathway analysis in accordance with Regional guidelines and OSWER Directives 9285.7-01B, 12/89 (Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Part A.) and 9285.7-01A (Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation Manual).
- o Initiate identification of Applicable or Relevant and Appropriate Requirements (ARARs) that may affect remedy selection.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (l)(1) and (l)(2).

***HSP due within sixty (60) days after the effective date of the AOC.***

- o Prepare a Field Sampling Plan (FSP) that describes the number, type, location of samples, type of analyses, QA/QC procedures, SOPs, chain of custody procedures, required detection limits and laboratory analytical methods.
- o Prepare a Data Management Plan (DMP) and other plans as needed to support all work under this SOW.

***Draft FSP due within sixty (60) days after the scoping meeting. Amended Draft FSP within thirty (30) days after the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft FSP. Please note, Data Management Plan (DMP), Sample and Analysis Plan (SAP), Site Security Plan (SSP), Sample Management Plan (SMP) and other individual plans can be included and submitted within the FSP.***

- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision). The plan shall describe the data quality objectives and measures necessary to achieve adequate data for use in remedy selection.

***Draft QAPP due within sixty (60) days after the scoping meeting. Amended QAPP within thirty (30) days after the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended QAPP. Please note; the QAPP is a standalone document that cannot be combined with other documents. An approved QAPP is required before collecting any environmental data.***

- o Develop an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses

and/or on-site audits of operations and has a system of corrective actions to be used in cases where performance does not meet the standards of the program.

- o Develop/review qualifications of the laboratory for the given analytical requirements.
- o Procure, manage, and provide oversight of pool and Team subcontracts for analytical services.
- o Accommodate any external audit or review mechanism that EPA may require.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).

***Submit monthly report showing work completed, ongoing work, anticipated work/deliverables for the next two months and problems/delays. Initially due as specified in the RI/FS Work Plan. Thereafter, due by the tenth day of the following month.***

***Submit brief weekly status report by email to EPA and the ODEQ, highlighting upcoming deliverables, current submitted deliverables pending for review and comments. Due at the beginning of each week.***

- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.
- o In case of an EPA contractor, submit costs to the Contracting Officer for approval for RI/FS work assignment specific Pollution Liability Insurance, if the contractor plans to bill insurance premiums as a direct charge to the work assignment and there is no contract wide Pollution Liability Insurance. ***(NOTE: The Contractor shall track and report all costs associated with this sub-task separately and in accordance with the Reports of Work.)***

## **TASK 2 FIELD INVESTIGATION**

This task includes work efforts to collect environmental data in support of the Remedial Investigation/Risk Assessment. Typical activities the PRP (or selected contractor) may perform include but are not limited to:

- o Site Reconnaissance.
  - Ecological resources reconnaissance.
  - Well inventory.
  - Existing well development and establishment of sampling points.
  - Air/ gas emission sampling to evaluate vapor intrusion.
  - Surface geophysical survey.
  - On-Site and residential groundwater well sampling.
  - Surface water sampling.
  - Soil (surface and subsurface) Sampling.
  - Sediment sampling.
  - Leachate sampling.
  - Field Screening.
- o Mobilization/Demobilization.
- o Hydrogeological Assessment.
  - Test boring and monitoring well installation and development.
  - Downhole geophysics.

- Groundwater elevation measurements.
- Surface water elevation measurements.
- Hydraulic testing.
- o Soil Boring, Drilling, and Testing.
- o Environmental Sampling.
  - Field screening.
  - Groundwater sampling.
  - Surface soil sampling.
  - Soil boring/permeability sampling.
  - Surface water and sediment sampling.
  - Air monitoring.
- o Ecological Characterization.
  - Wetland and habitat delineation/function and value assessment.
  - Wildlife observations.
  - Benthic reconnaissance/community characterization.
  - Identification of endangered species and others of special concern.
  - Biota sampling/population studies.
  - Bioassays.
  - Bioaccumulation studies.
- o Geotechnical Survey.
- o Field generated waste characterization and disposal in accordance with Local, State and Federal Regulations.

After completing the field sampling and analysis and as specified in the project schedule in the Final RI/FS Work Plan, the PRP (or selected contractor) shall submit a concise Draft Preliminary Site Characterization Summary Report (PSCSR) to the EPA for review and approval. This report shall review the investigative activities that have taken place, and describe and display the Site's data documenting the location and characteristics of surface and subsurface features and contamination at the Site including the affected medium, location, types, physical state, and concentration and quantity of contaminants.

The Draft PSCSR shall provide the EPA and the PRP (or selected contractor) with a preliminary reference for developing the Baseline Human Health and Ecological Risk Assessments, evaluating the development and screening of remedial alternatives, and the refinement and identification of ARARs.

***Draft PSCSR due as specified in the Final RI/FS Work Plan. Amended Draft due within thirty (30) days of the receipt of EPA's comments. Final due within fifteen (15) days of the receipt of the EPA's approval of the Amended Draft PSCSR.***

### **TASK 3 SAMPLE ANALYSIS**

This task includes the analysis of environmental and waste samples. The PRP (or selected contractor) may utilize or be directed to utilize a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment.

In case of EPA contractors, may utilize or be directed to utilize the Contract Laboratory Program (CLP), laboratories procured under sub pool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

#### **TASK 4 ANALYTICAL SUPPORT AND DATA VALIDATION**

This task includes work efforts involved in scheduling, coordination, tracking, and oversight of sample analyses and validation of analytical data produced. Typical activities the PRP (or selected contractor) may perform include but are not limited to:

- o Collect, prepare, and ship environmental samples in accordance with the FSP (developed under Task 1). The following types of sampling may be required: -Field screening. -Groundwater sampling. -Surface and subsurface soil sampling. -Surface water and sediment sampling. -Air monitoring and sampling. -Biota sampling. -Other types of media sampling and screening.
- o Develop DQOs for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling.
- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
- o In case of EPA contractor:
  - o coordinate with the EPA Sample Management Office (SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
  - o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.
- o Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The PRP (or selected contractor) shall perform data validation in accordance with Regional guidelines. Data validation involves the overall laboratory analytical data quality assessment and usability processes.
- o Review data for usability for its intended purpose.
- o Provide reports on data validation and usability.



## **TASK 5 DATA EVALUATION**

This task includes work efforts related to the compilation of Remedial Investigation (RI) analytical and field data. The data shall be entered into a Region-compatible computer data base and shall be utilized in the preparation of the RI and Risk Assessment Report tables, maps and figures. Typical activities the PRP (or selected contractor) may perform include but are not limited to:

- o Data usability evaluation/field QA/QC.
- o Data Reduction and Tabulation.
  - Soil boring and monitoring well logs.
  - Field sampling data.
  - Hydrogeological testing data.
  - Geophysical data (downhole geophysics, survey).
  - Analytical results.
- o Environmental Fate and Transport Modeling/Evaluation.
- o Data trend evaluation and/or modeling and submission of Technical Memorandum.

## **TASK 6 ASSESSMENT OF RISK**

This task includes work efforts to conduct a Baseline Risk Assessment and to prepare the necessary Risk Assessment documents. The objective of this assessment is to characterize and quantify where appropriate, the current and potential human health and environmental risks that would prevail if no further remedial action is taken.

The Risk Assessment must be done in accordance with the guidance, procedures, assumptions, methods and formats contained in:

- o Human Health Evaluation Manual Supplemental Guidance: "Standard Default Exposure Factors" OSWER Directive 9285.6-03 (EPA, March 25, 1991).
- o EPA Regional guidance as specified.
- o Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A) Interim Final (EPA 540/1-89, December 1989).
- o Risk Assessment Guidance for Superfund (RAGS): Part D, Volume I: Human Health Evaluation Manual (Part D, Standardized Planning, Reporting and Review of Superfund Risk Assessments) Final December 2001 (effective immediately for all new CERCLA risk assessments)
- o Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation (EPA 540/1-89/001, March 1989).
- o Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final (EPA 540-R-97-006, June 1997)
- o Guidance for Data Useability in Risk Assessment (EPA/540/G-90/008, September 1990).
- o Air/Superfund National Technical Guidance Study Series Volumes I, II, III, and IV (EPA 450/1-89- 001, 002, 003, 004, July 1989).
- o Ecological Assessment of Hazardous Waste Sites: A Field and Laboratory Reference Document (EPA 600/3-89/013, March 1989).

o The Baseline Risk Assessment shall be separated into separate components: (1) Human Health Risk Assessment (HHRA), (2) Screening Level Ecological Risk Assessment (SLERA) and (3) Baseline Ecological Risk Assessment (BERA).

o The Human Health Risk Assessment shall address the following:

- o Hazard identification.
- o Dose-response assessment.
- o Exposure assessment.
- o Risk characterization.
- o Limitations/uncertainties.
- o Site conceptual model.

***Draft due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of EPA's comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI/FS HHRA.***

o The Screening Level Ecological Risk Assessment shall address the following:

- o Definition of objectives.
- o Characterization of site and potential receptors.
- o Selection of chemicals, indicator species, and end points for risk evaluation.
- o Exposure assessment.
- o Toxicity assessment/ecological effects assessment.
- o Risk characterization.
- o Limitations/uncertainties.
- o Site conceptual model.

***Draft SLERA due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of EPA comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI/FS SLERA.***

o The ecological risk assessment guidance for Superfund is composed of eight steps and several scientific/management decision points (SMDPs). The first two steps result in the Screening Level Ecological Risk Assessment (SLERA). Upon delivery and review of the SLERA by the risk managers and the risk assessment team, a decision about whether a full baseline ecological risk assessment (BERA) is made. If the process stops at this point, the decision not to continue is documented in a SMDP. If the process continues, the assessment continues through the remaining steps and SMDPs listed in the guidance.

If the decision is to continue the process.

***Draft BERA due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of EPA comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI/FS BERA.***

## **TASK 7 TREATABILITY STUDY/PILOT TESTING**

This task includes work efforts related to the conduct of laboratory screening, bench-scale and pilot-scale treatability studies to determine the suitability of remedial technologies or alternatives to site conditions and problems. Typical activities the PRP (or selected contractor) may perform include but are not limited to:

- o Provide test facility and equipment.
- o Test and operate equipment.
- o Retrieve sample for testing.
- o Prepare Technical Memorandum.
- o Characterization and disposal of residuals in accordance with Local, State and Federal Regulations.
- o Prepare Treatability Study Work Plan (TSWP), including separate Health and Safety Plan (HSP) and Sampling and Analysis Plan (SAP).

***Draft due within sixty (60) days of the receipt of EPA's notice that treatability studies are required. Amended Draft due within thirty (30) days of the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft TSWP and SAP.***

- o Prepare Treatability Study Report (TSR) analyzing and interpreting the testing results.
- o The report must evaluate each candidate technology's effectiveness, implementability, cost, and actual results as compared with predicted results.
- o This includes evaluation of full-scale application of the candidate technologies, including a sensitivity analysis identifying the key parameters affecting full-scale operation

***Draft due as specified in the Final Treatability Study Work Plan. Amended Draft due within forty-five (45) days of the receipt of the EPA's comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft TSR.***

## **TASK 8 REMEDIAL INVESTIGATION REPORT**

This task includes work efforts related to the preparation of findings once data has been evaluated. The RI shall provide information to assess risks to human health and the environment and to support the development, evaluation and selection of appropriate response alternatives. The task includes all draft and final reports. The RI report shall be written in accordance with "Guidance for Conducting Remedial Investigations/Feasibility Studies under CERCLA," OSWER Directive 9355.3-01, October 1988, Interim Final (or latest revision) and "Guidance for Data Usability in Risk Assessment," (EPA/540/G-90/008), September 1990 (or latest revision).

The RI report shall include a discussion of the following:

- o Site Background.

- o Investigation.
  - Field Investigation and technical approach.
  - Chemical analyses and analytical methods.
  - Field methodologies (biological, surface water, sediment, soil boring, soil sampling, monitoring well installation, groundwater sampling, hydrogeological assessment).
- o Site Characteristics.
  - Geology.
  - Hydrogeology.
  - Meteorology.
  - Demographics and land use.
  - Ecological assessment.
- o Nature and Extent of Contamination.
  - Contaminant sources.
  - Contaminant distribution and trends.
- o Fate and Transport.
  - Contaminant characteristics.
  - Transport processes.
  - Contaminant migration trends.
- o Summary and Conclusions.

The RI Report is prepared after completion of all the risk assessments and must summarize results of field activities to characterize the site, sources of contamination, nature and extent of contamination and the fate and transport of contaminants.

In developing the RI Report, the PRP (or selected contractor) must follow the FI Report format described in Table 3-13 of the RI/FS Guidance. The RIS Report must include text covering all the topics listed in Table 6-5.

*Draft due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of the EPA's comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI Report.*

## **TASK 9 REMEDIAL ALTERNATIVES SCREENING**

This task includes work efforts to develop appropriate remedial alternatives to undergo full evaluation (Task 12). The alternatives are to encompass a range including innovative treatment technologies consistent with the regulations outlined in the National Contingency Plan (NCP), 40 CFR Part 300 and the Guidance for Conducting Remedial Investigations and Feasibility studies under CERCLA (OSWER Directive 9355.3-01 and other OSWER Directives including 9355.4-03, October 18, 1989, and 9283.1-06, May 27, 1992, "Considerations in Ground Water Remediation at Superfund Sites"). Typical activities the PRP (or selected contractor) may perform include but are not limited to:

- o Establish remedial action objectives.
- o Establish general response actions.

- o Identify and screen applicable remedial technologies.
- o Develop remedial alternatives in accordance with Section 300.430(e) of the NCP (1990).
- o Screen remedial alternatives for effectiveness, implementability and cost.
- o Prepare Technical Memorandum.

***Draft Alternatives Screening Technical Memorandum due as specified in the Final RI/FS Work Plan. Amended Draft due within thirty (30) days of the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft.***

## **TASK 10 REMEDIAL ALTERNATIVES EVALUATION**

This task includes efforts associated with the assessment of individual alternatives against each of the nine evaluation criteria and a comparative analysis of all options against the evaluation criteria. The analysis shall be consistent with the National Contingency Plan (NCP), 40 CFR Part 300 and shall consider the Guidance for Conducting Remedial Investigation and Feasibility Studies under CERCLA (OSWER Directive 9355.3-01) and other pertinent OSWER guidance. EPA will make the determination regarding final selection of the remedial alternative.

A preliminary list of probable Applicable or Relevant and Appropriate Requirements (ARARs) will be generated by the PRP (or selected contractor) during the Remedial Investigation and Feasibility Study process. This list will be compiled according to established EPA guidance, research of existing regulations, and collection of site-specific information and data. Three types of ARARs will be identified:

- 1) Chemical-Specific ARARs: These ARARs are usually health- or risk-based numerical values or methodologies used to determine acceptable concentrations of chemicals that may be found in or discharged to the environment (e.g., maximum contaminant levels that establish safe levels in drinking water).
- 2) Location-Specific ARARs: These ARARs restrict actions or contaminant concentrations in certain environmentally sensitive areas. Examples of areas regulated under various Federal laws include floodplains, wetlands, and locations where endangered species or historically significant cultural resources are present.
- 3) Action-Specific ARARs: These ARARs are usually technology- or activity-based requirements or limitations on actions or conditions involving specific substances.

The nine criteria the PRP (or selected contractor) shall employ in evaluation of remedial alternatives are:

- o Overall protection of human health and the environment.
- o Compliance with ARARs.
- o Long-term effectiveness and permanence.
- o Reduction in toxicity, mobility or volume through treatment.
- o Short-term effectiveness.

- o Implementability - technical and administrative.
- o Cost.
- o State acceptance.
- o Community acceptance.
- o -The final two criteria, state or support agency acceptance and community acceptance, will be evaluated following comment on the RI/FS report and the proposed plan and will be addressed once a final decision is being made and the Record of Decision is being prepared.

This task requires:

- o Complete screening of remedial alternatives against the nine criteria and ARARs.
- o Cost estimates are developed at both the "screening of alternatives" and "detailed analysis of alternatives" phases of the FS, with expected accuracy ranges of -50 to +100 percent and -30 to +50 percent, respectively.
- o A discount rate of 7% should generally be used in developing present value cost estimates for remedial action alternatives. (Based on EPA policy stated in the preamble to the NCP and OWSER Directive 9355.3-20)
- o Prepare Technical Memorandum.

***Draft Alternative Evaluation Technical Memorandum due as specified in the Final RI/FS Work Plan. Amended Draft due within thirty (30) days of the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft ARAR Report.***

## **TASK 11 FS REPORT AND RI/FS REPORT**

This task includes work efforts related to the preparation of findings once remedial alternatives have been screened and evaluated. The task includes preparation of all draft and final reports. The Feasibility Study Report shall include a discussion of the following:

- o Feasibility Study Objectives.
- o Remedial Action Objectives.
- o General Response Actions.
- o Identification and screening of Remedial Technologies.
- o Remedial Alternatives Description.
- o Detailed Analysis of Remedial Alternatives (individual and comparative).
- o Summary and Conclusions.

In developing the Feasibility Study (FS) Report, the PRP (or selected contractor) must follow the FS Report format described in Table 6-5 of the RI/FS Guidance. The FS Report must include text covering all the topics listed in Table 6-5.

***Draft FS Report due as specified in the Final RI/FS Work Plan. Amended Draft FS Report due within thirty (30) days of the receipt of the EPA's comments. Final Amended FS Report due within fourteen (14) days of the receipt of the EPA's comments.***

## **TASK 12 POST RI/FS SUPPORT**

This task includes efforts to support the Agency's Record of Decision (ROD). The final recommendation contained in the ROD shall represent the opinion and recommendation of EPA not that of the PRP (or selected contractor). Typical activities the PRP (or selected contractor) may perform include but are not limited to:

- o Attend public meetings, briefings, public hearings, technical meetings with PRPs.
- o Prepare presentation materials.
- o Provide technical assistance in the preparation of the Responsiveness Summary.
- o Provide technical assistance in the preparation of the Proposed Plan and ROD.

EPA will identify and select the preferred alternative, prepare the Proposed Plan, conduct the public meeting and complete the ROD.

- o If needed, in response to public comments, assist EPA in preparing a Feasibility Study Addendum.

## **TASK 13 ADMINISTRATIVE RECORD**

This task is not active; EPA will develop the Administrative Record and Administrative Record Index

## **TASK 14 WORK ASSIGNMENT CLOSE OUT**

This task includes efforts related to work assignment close out. Typical activities the PRP (or selected contractor) may perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

## Appendix A (Guidance Documents)

### REFERENCES

The following list, although not comprehensive, contains many of the regulations and guidance documents that apply to the RI/FS process:

1. National Oil and Hazardous Substances Pollution Contingency Plan (The NCP), 40 C.F.R. Part 300
2. "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.  
<http://www.epa.gov/superfund/policy/remedy/pdfs/540g-89004-s.pdf>
3. "Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies," U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.
4. "Guide to Preparing Superfund Proposed Plan, Records of Decision, and Other Remedy Selection Decision Documents," U.S. EPA, Office of Solid Waste and Emergency Response, EPA 540-R-98-031, July 1999, OSWER Directive No. 9200.1-23P.
5. "A Compendium of Superfund Field Operations Methods," Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.
6. "EPA NEIC Policies and Procedures Manual," May 1978, revised November 1984, EPA-330/9-78-001-R.
7. "Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements," U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.
8. "CERCLA Compliance with Other Laws Manual," Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.
9. "Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites," U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.



10. "Draft Guidance on Preparing Superfund Decision Documents," U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.3-02.
11. "Performance of Risk Assessments in Remedial Investigation/Feasibility Studies (RI/FSS) Conducted by Potentially Responsible Parties (PRPs)," August 28, 1990, OSWER Directive No. 9835.15.
12. "Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions," April 22, 1991, OSWER Directive No. 9355.0-30.
13. OSHA Regulations at 29 C.F.R. 1910.120
14. "Final Guidance on Administrative Records for Selecting CERCLA Response Actions," U.S. EPA, Office of Waste Programs Enforcement, December 3, 1990, OSWER Directive No. 9833.3A.
15. "Community Relations in Superfund: A Handbook," U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9230.0#3B.
16. "Community Relations During Enforcement Activities And Development of the Administrative Record," U.S. EPA, Office of Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1A.
17. EPA 1997. "Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments." Office of Emergency and Remedial Response. EPA/540-R-97-006. June 5, 1997.
18. U.S. Environmental Protection Agency (EPA) 1987a. "Data Quality Objectives for Remedial Response Activities." Office of Emergency and Remedial Response and Office of Waste Programs Enforcement. EPA/540/G-87/003. OSWER Directive No. 9335.0-7b. March 1987.
19. EPA 1991a. "Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors." Office of Emergency and Remedial Response. OSWER Directive No. 9235.6-03. March 1991.
20. "Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part A)," December 1989, EPA/540/1-89/002.

21. EPA 1991b. "Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual (Part B), Development of Risk-Based Preliminary Remediating Goals." Office of Emergency and Remedial Response. OSWER Directive No. 9285.7-01B. December 1991.
22. EPA 1991c. "Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual (Part C), Risk Evaluation of Remedial Alternatives." Office of Emergency and Remedial Response. OSWER Directive No. 9285.7-01C. 1991.
23. EPA 1992a. "Guidance for Data Useability in Risk Assessment." Office of Emergency and Remedial Response. OSWER Directive No. 9285.7-09A. April 1992 (and Memorandum from Henry L. Longest dated June 2, 1992).
24. "Risk Assessment Guidance for Superfund. Volume I: Human Health Evaluation Manual. Supplemental Guidance. Dermal Risk Assessment." Interim Guidance, 1998.
25. "Risk Assessment Guidance for Superfund - Volume II Environmental Evaluation Manual," March 1989, EPA/540/1-89/001.
26. EPA 1992b. "Supplemental Guidance to RAGS. Calculating the Concentration Term." Office of Emergency and Remedial Response. OSWER Directive No. 9285.7-081. May 1992.
27. EPA 1993a. "Data Quality Objectives Process for Superfund." Office of Solid Waste and Emergency Response. EPA/540-R-93-071. September 1993.
28. EPA 1998a. "Risk Assessment Guidance for Superfund, Volume 1 - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments). Interim. Process for Designing and Conducting Ecological Risk Assessments." Office of Solid Waste and Emergency Response. EPA/540-R-97-033. January 1998. Publication 9285.7-47, Final, December 2001.
29. EPA 1998b. "EPA Guidance for Quality Assurance Project Plans." Office of Research and Development. EPA QA/G-5. EPA/600/R-98/018. February 1998.
30. EPA 2001. "EPA Requirements for Quality Assurance Project Plans." Office of Environmental Information. EPA QA/R-5. EPA/240/B-01/003. March 2001.
31. "Health and Safety Requirements of Employees Employed in Field Activities," U.S. EPA, Office of Emergency Response, July 12, 1981, EPA Order No. 1440.2.

32. "Exposure Factors Handbook", EPA, 1997.
33. Integrated Risk Information System (IRIS), 2000.
34. "Health Effects Assessment Summary Tables (HEAST)", "U.S. EPA, Office of Solid Waste and Emergency Response, 1997, EPA/540/R-95/036.
35. "Guidance for Conducting Non-Time-Critical Removal Actions Under CERCLA", U.S. EPA, Office of Emergency and Remedial Response, August 1993, OSWER Directive No. 9360.0-32.
36. Guide for Conducting Treatability Studies Under CERCLA, Final. U.S. EPA, Office of Solid Waste and Emergency Response, EPA/540/R-92/071a, October 1992.
37. Guide to Management of Investigation-Derived Wastes, U.S. EPA, Office of Solid Waste and Emergency Response, Publication 9345.3-02-95, January 1992.
38. Contaminated Sediment Remediation Guidance for Hazardous Waste Sites, U.S. EPA, Office of Solid Waste and Emergency Response, EPA-540-R-05-012; OSWER 9355.0-85, December, 2005.
39. Revised Policy on Performance of Risk Assessments During Remedial Investigation/Feasibility Studies (RI/FS) Conducted by Potentially Responsible Parties, U.S. EPA, Office of Solid Waste and Emergency Response, OSWER directive No. 9835.15c, Jan 1996.

## **Appendix B (Acronyms, List of Deliverables and Schedule)**

### **Acronyms**

AOC	Administrative Order on Consent
ARARs	Applicable or Relevant and Appropriate Requirements
BERA	Baseline Ecological Risk Assessment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CLP	Contract Laboratory Program
CSM	Conceptual Site Model
DMP	Data Management Plan
DQO	Data Quality Objectives
EPA	U.S. Environmental Protection Agency
ERT	Environmental Response Team
ESD	Environmental Services Division
FS	Feasibility Study
FSP	Field Sampling Plan
HSP	Health and Safety Plan
HHRA	Human Health Risk Assessment
NAPLs	Non aqueous phase liquid
NCP	National Contingency Plan
ODEQ	Oklahoma Department of Environmental Quality
PRP	Potentially Responsible Party
PSCSR	Preliminary Site Characterization Summary Report
QAPP	Quality Assurance Project Plan

QA/QC	
RI	Remedial Investigation
RSCC	Regional Sample Management Coordinator
SAP	Sample and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act of 1986
SLERA	Screening Level Ecological Risk Assessment
SMO	Sample Management Office
SOPs	Standard Operating Procedures
SOW	Statement of Work
SMP	Sample Management Plan
SSP	Site Security Plan
RI	Remedial Investigation
RI/FS	Remedial Study and Feasibility Study
ROD	Record of Decision
TSWP	Treatability Study Work Plan
TSR	Treatability Study Report

### **List of Deliverables and Schedule**

#### **DUE WITHIN 30 DAYS**

*Scoping meeting to occur within thirty (30) days after the effective date of the AOC.*

#### **DUE WITHIN 60 DAYS**

*Draft RI/FS Work Plan due within sixty (60) days after the scoping meeting. Amended Draft Work Plan within thirty (30) days after the receipt of the EPA's comments. Final Work Plan due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft RI/FS Work Plan.*

*Draft Conceptual Site Model (CSM) to be included with the Draft RI/FS Work Plan and subsequent revisions (Amended and Final Work Plan).*

*HSP due within sixty (60) days after the effective date.*

*Draft FSP due within sixty (60) days after the scoping meeting. Amended Draft FSP within thirty (30) days after the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft FSP. Please note, Data Management Plan (DMP), Sample and Analysis Plan (SAP), Site Security Plan (SSP), Sample Management Plan (SMP) and other individual plans can be included and submitted within the FSP.*

*QAPP due within sixty (60) days after the scoping meeting. Amended QAPP within thirty (30) days after the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended QAPP. Please note; the QAPP is a standalone document that cannot be combined with other documents. An approved QAPP is required before collecting any environmental data.*

#### **DUE AS SPECIFIED IN THE FINAL RI/FS WORK PLAN AND AFTER FIELD SAMPLING AND ANALYSIS**

*Draft PSCSR due as specified in the Final RI/FS Work Plan. Amended Draft due within thirty (30) days of the receipt of EPA's comments. Final due within fifteen (15) days of the receipt of the EPA's approval of the Amended Draft PSCSR.*

#### **DUE AS SPECIFIED IN THE FINAL RI/FS WORK PLAN**

*Draft due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of EPA's comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI/FS HHRA.*

*Draft SLERA due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of EPA comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI/FS SLERA.*

*Draft BERA due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of EPA comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI/FS BERA.*

#### **DUE WITHIN 60 DAYS AFTER NOTIFICATION**

*Draft due within sixty (60) days of the receipt of EPA's notice that treatability studies are required. Amended Draft due within thirty (30) days of the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft TSWP and SAP.*

*Draft due as specified in the Final Treatability Study Work Plan. Amended Draft due within forty-five (45) days of the receipt of the EPA's comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft TSR.*

#### **DUE AS SPECIFIED IN THE FINAL RI/FS WORK PLAN**

*Draft due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of the EPA's comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI Report.*

*Draft Alternatives Screening Technical Memorandum due as specified in the Final RI/FS Work Plan. Amended Draft due within thirty (30) days of the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft.*

*Draft Alternative Evaluation Technical Memorandum due as specified in the Final RI/FS Work Plan. Amended Draft due within thirty (30) days of the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft ARAR Report.*

*Draft FS Report due as specified in the Final RI/FS Work Plan. Amended Draft FS Report due within thirty (30) days of the receipt of the EPA's comments. Final Amended FS Report due within fourteen (14) days of the receipt of the EPA's comments.*

#### **DUE MONTHLY AND WEEKLY**

*Submit monthly report showing work completed, ongoing work, anticipated work/deliverables for the next two months and problems/delays. Initially due as specified in the RI/FS Work Plan. Thereafter, due by the tenth day of the following month.*

*Submit brief weekly status report by email to EPA and the ODEQ, highlighting upcoming deliverables, current submitted deliverables pending for review and comments. Due at the beginning of each week.*

## **Appendix B (Acronyms, List of Deliverables and Schedule)**

### **Acronyms**

AOC	Administrative Order on Consent
ARARs	Applicable or Relevant and Appropriate Requirements
BERA	Baseline Ecological Risk Assessment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CLP	Contract Laboratory Program
CSM	Conceptual Site Model
DMP	Data Management Plan
DQO	Data Quality Objectives
EPA	U.S. Environmental Protection Agency
ERT	Environmental Response Team
ESD	Environmental Services Division
FS	Feasibility Study
FSP	Field Sampling Plan
HSP	Health and Safety Plan
HHRA	Human Health Risk Assessment
NAPLs	Non aqueous phase liquid
NCP	National Contingency Plan
ODEQ	Oklahoma Department of Environmental Quality
PRP	Potentially Responsible Party
PSCSR	Preliminary Site Characterization Summary Report
QAPP	Quality Assurance Project Plan



QA/QC	
RI	Remedial Investigation
RSCC	Regional Sample Management Coordinator
SAP	Sample and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act of 1986
SLERA	Screening Level Ecological Risk Assessment
SMO	Sample Management Office
SOPs	Standard Operating Procedures
SOW	Statement of Work
SMP	Sample Management Plan
SSP	Site Security Plan
RI	Remedial Investigation
RI/FS	Remedial Study and Feasibility Study
ROD	Record of Decision
TSWP	Treatability Study Work Plan
TSR	Treatability Study Report

### **List of Deliverables and Schedule**

#### **DUE WITHIN 30 DAYS**

*Scoping meeting to occur within thirty (30) days after the effective date of the AOC.*

#### **DUE WITHIN 60 DAYS**

*Draft RI/FS Work Plan due within sixty (60) days after the scoping meeting. Amended Draft Work Plan within thirty (30) days after the receipt of the EPA's comments. Final Work Plan due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft RI/FS Work Plan.*

*Draft Conceptual Site Model (CSM) to be included with the Draft RI/FS Work Plan and subsequent revisions (Amended and Final Work Plan).*

*HSP due within sixty (60) days after the effective date.*

*Draft FSP due within sixty (60) days after the scoping meeting. Amended Draft FSP within thirty (30) days after the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft FSP. Please note, Data Management Plan (DMP), Sample and Analysis Plan (SAP), Site Security Plan (SSP), Sample Management Plan (SMP) and other individual plans can be included and submitted within the FSP.*

*QAPP due within sixty (60) days after the scoping meeting. Amended QAPP within thirty (30) days after the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended QAPP. Please note; the QAPP is a standalone document that cannot be combined with other documents. An approved QAPP is required before collecting any environmental data.*

#### **DUE AS SPECIFIED IN THE FINAL RI/FS WORK PLAN AND AFTER FIELD SAMPLING AND ANALYSIS**

*Draft PSCSR due as specified in the Final RI/FS Work Plan. Amended Draft due within thirty (30) days of the receipt of EPA's comments. Final due within fifteen (15) days of the receipt of the EPA's approval of the Amended Draft PSCSR.*

#### **DUE AS SPECIFIED IN THE FINAL RI/FS WORK PLAN**

*Draft due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of EPA's comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI/FS HHRA.*

*Draft SLERA due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of EPA comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI/FS SLERA.*

*Draft BERA due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of EPA comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI/FS BERA.*

#### **DUE WITHIN 60 DAYS AFTER NOTIFICATION**

*Draft due within sixty (60) days of the receipt of EPA's notice that treatability studies are required. Amended Draft due within thirty (30) days of the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft TSWP and SAP.*

*Draft due as specified in the Final Treatability Study Work Plan. Amended Draft due within forty-five (45) days of the receipt of the EPA's comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft TSR.*

#### **DUE AS SPECIFIED IN THE FINAL RI/FS WORK PLAN**

*Draft due as specified in the Final RI/FS Work Plan. Amended Draft due within forty-five (45) days of the receipt of the EPA's comments. Final due within thirty (30) days of the receipt of the EPA's approval of the Amended Draft RI Report.*

*Draft Alternatives Screening Technical Memorandum due as specified in the Final RI/FS Work Plan. Amended Draft due within thirty (30) days of the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft.*

*Draft Alternative Evaluation Technical Memorandum due as specified in the Final RI/FS Work Plan. Amended Draft due within thirty (30) days of the receipt of the EPA's comments. Final due within fourteen (14) days of the receipt of the EPA's approval of the Amended Draft ARAR Report.*

*Draft FS Report due as specified in the Final RI/FS Work Plan. Amended Draft FS Report due within thirty (30) days of the receipt of the EPA's comments. Final Amended FS Report due within fourteen (14) days of the receipt of the EPA's comments.*

#### **DUE MONTHLY AND WEEKLY**

*Submit monthly report showing work completed, ongoing work, anticipated work/deliverables for the next two months and problems/delays. Initially due as specified in the RI/FS Work Plan. Thereafter, due by the tenth day of the following month.*

*Submit brief weekly status report by email to EPA and the ODEQ, highlighting upcoming deliverables, current submitted deliverables pending for review and comments. Due at the beginning of each week.*

**ENCLOSURE 4**  
**SUMMARY OF PAST COSTS**

## IFMS Reconciliation Pending

## Itemized Cost Summary

WILCOX OIL, BRISTOW, OK SITE ID = 06 GG

UNRECONCILED COST FROM INCEPTION THROUGH 05/31/2014

SPECIAL NOTICE FOR RI/FS

<b>REGIONAL PAYROLL COSTS .....</b>	<b>\$75,037.49</b>
<b>HEADQUARTERS PAYROLL COSTS .....</b>	<b>\$146.09</b>
<b>REGIONAL TRAVEL COSTS .....</b>	<b>\$5,190.59</b>
<b>ENFORCEMENT SUPPORT SERVICES (ESS)</b>	
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (68-W0-0091) ...	\$87.77
TECHLAW (68-W4-0016) .....	\$434.83
TOEROEK ASSOCIATES, INC. (EPW10011) .....	\$91,034.49
<b>HAZARD RANKING/NATIONAL PRIORITY LIST SUPPORT</b>	
COMPUTER SCIENCE CORPORATION (EPW10016) .....	\$63,562.17
<b>RECORDS MANAGEMENT/ DOCUMENT CONTROL</b>	
SCIENCE APPLICATION INT'L CORP. (EPR60801) .....	\$33.07
<b>REGIONAL OVERSIGHT CONTRACT (REDI-SUBCLASS)</b>	
DYNAMAC CORPORATION (EPW06077) .....	\$63,700.72
<b>MISCELLANEOUS COSTS (MIS) .....</b>	<b>\$337.58</b>
<b>EPA INDIRECT COSTS .....</b>	<b>\$126,452.95</b>
<b>Total Site Costs:</b>	<b>\$426,017.75</b>

**ENCLOSURE 5**

**PARTIES RECEIVING THIS LETTER**

**PARTIES RECEIVING THIS LETTER**

**SPECIAL NOTICE REGARDING  
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY  
WILCOX OIL SUPERFUND SITE  
BRISTOW, CREEK COUNTY, OKLAHOMA**

**Marathon Oil**

Marathon Oil Company  
5555 San Felipe Street  
Houston, Texas 77056

Registered Agent  
CT Corporation System  
1300 East 9<sup>th</sup> Street  
Cleveland, Ohio 44114

**Atlantic Richfield**

Atlantic Richfield Company  
28100 Torch Parkway  
Warrenville, Illinois 60555

Registered Agent  
The Corporation Trust Company  
Corporation Trust Center  
1209 Orange Street  
Wilmington, Delaware 19801

**BNSF Railway Company**

2650 Lou Menk Drive  
Fort Worth, Texas 76131

Registered Agent  
The Corporation Trust Center  
1209 Orange Street  
Wilmington, Delaware 19801

**Sun Pipe Line Company**

1735 Market Street  
Philadelphia, Pennsylvania 19103

Registered Agent  
Corporation Service Company  
Lawyers Incorporating Service Company  
1999 Bryan Street, Suite 900  
Dallas, Texas 75201

**BP Corporation**

Registered Agent  
The Prentice-Hall Corporation System, Inc.  
Suite 500  
251 East Ohio Street  
Indianapolis, Indiana 46204

**Sunoco, Inc.**

1735 Market Street  
Philadelphia, Pennsylvania 19103

Registered Agent  
Corporation Service Company  
115 SW 89<sup>th</sup> Street  
Oklahoma City, Oklahoma 73139

**ENCLOSURE 6**  
**EVIDENTIARY DOCUMENTS**



Marathon

30430

A S S I G N M E N T

KNOW ALL MEN BY THESE PRESENTS:

Whereas, the Marathon Oil Company, a corporation heretofore organized under and pursuant to the laws in the State of West Virginia (and whose corporate name was duly changed on August 8, 1934, from that of Mid-Kansas Oil and Gas Company to that of Marathon Oil Company) and, whereas the Marathon Oil Company, pursuant to the statutes of West Virginia in such cases made and provided, dissolved and discontinued business July 31, 1936.

NOW, THEREFORE, in consequence of its dissolution, has granted, transferred, assigned and conveyed and does hereby grant, transfer, assign and convey unto The Ohio Oil Company, an Ohio Corporation of Findlay, Ohio, and sole stockholder of the Marathon Oil Company at the time of dissolution, the following described Tank Site Agreement between A. A. Rollestone, a single man, and Transcontinental Oil Company, a Delaware Corporation, covering lands located in the County of Creek, State of Oklahoma, and recorded in the Office of the County Clerk thereof in Book 360 at Page 63, to-wit:

Northwest Quarter (NW $\frac{1}{4}$ ) of the Northwest Quarter (NW $\frac{1}{4}$ ) of Section 29, T. 16 N., R. 9E,

together with all personal property used or obtained in connection with said Tank Site Agreement.

Marathon Oil Company hereby warrants the title thereto.

TO HAVE AND TO HOLD unto said The Ohio Oil Company, its successors and assigns forever, subject, however, to all of the terms and conditions set forth in said respective Tank Site Agreement.

IN WITNESS WHEREOF, Marathon Oil Company has caused these presents to be duly executed by its proper corporate officers thereunto duly authorized, and its corporate seal to be hereunto affixed, duly attested, September, 10, 1936.

ATTEST: W. R. Hodge  
Assistant Secretary.

MARATHON OIL COMPANY  
By F. F. Young, Vice-President  
(Corp. SEAL)

30430---Page 2.

ACKNOWLEDGEMENT

STATE OF OHIO        }  
COUNTY OF HANCOCK } SS

Before me, L. C. McCoy, a Notary Public in and for said County and State aforesaid, came F. F. Young, Vice-President of the Marathon Oil Company, personally known to me as being the identical person whose name is subscribed and affixed to the foregoing instrument as Vice President of said Company, and in behalf of said Company acknowledged the same to be his free and voluntary act and deed and the free and voluntary act and deed of such corporation, and that he voluntarily affixed thereto the corporate seal of said Company and caused the same to be attested by the Assistant Secretary of said Company, and that said instrument was so executed for the purposes therein expressed and by order of the Board of Directors of said Company.

IN TESTIMONY WHEREOF, I have hereunto set my hand and notarial seal this 10th day of September, 1936.

L. C. McCoy  
Notary Public.

My Commission expires Sept. 19, 1939.

(Notary SEAL)  
Hancock County, Ohio.

STATE OF OKLAHOMA  
COUNTY OF CREEK

This instrument was filed in my office for record on MAY 28, 1937 8 o'clock A. M. and duly recorded in Book 445 Page 76.

HUBER HUGHES, County Clerk.  
BY: C. K. Maddox, Deputy

(SEAL)